

# DISTRO

080312 #51

engadget<sup>®</sup>

# Mt. Lion

**MICROSOFT'S  
FRESH NEW  
OUTLOOK  
ON EMAIL**

**IS IT TOO  
LATE FOR  
T-MOBILE'S  
GALAXY  
NOTE?**

**Q&A WITH  
HTC'S  
ERIC LIN**

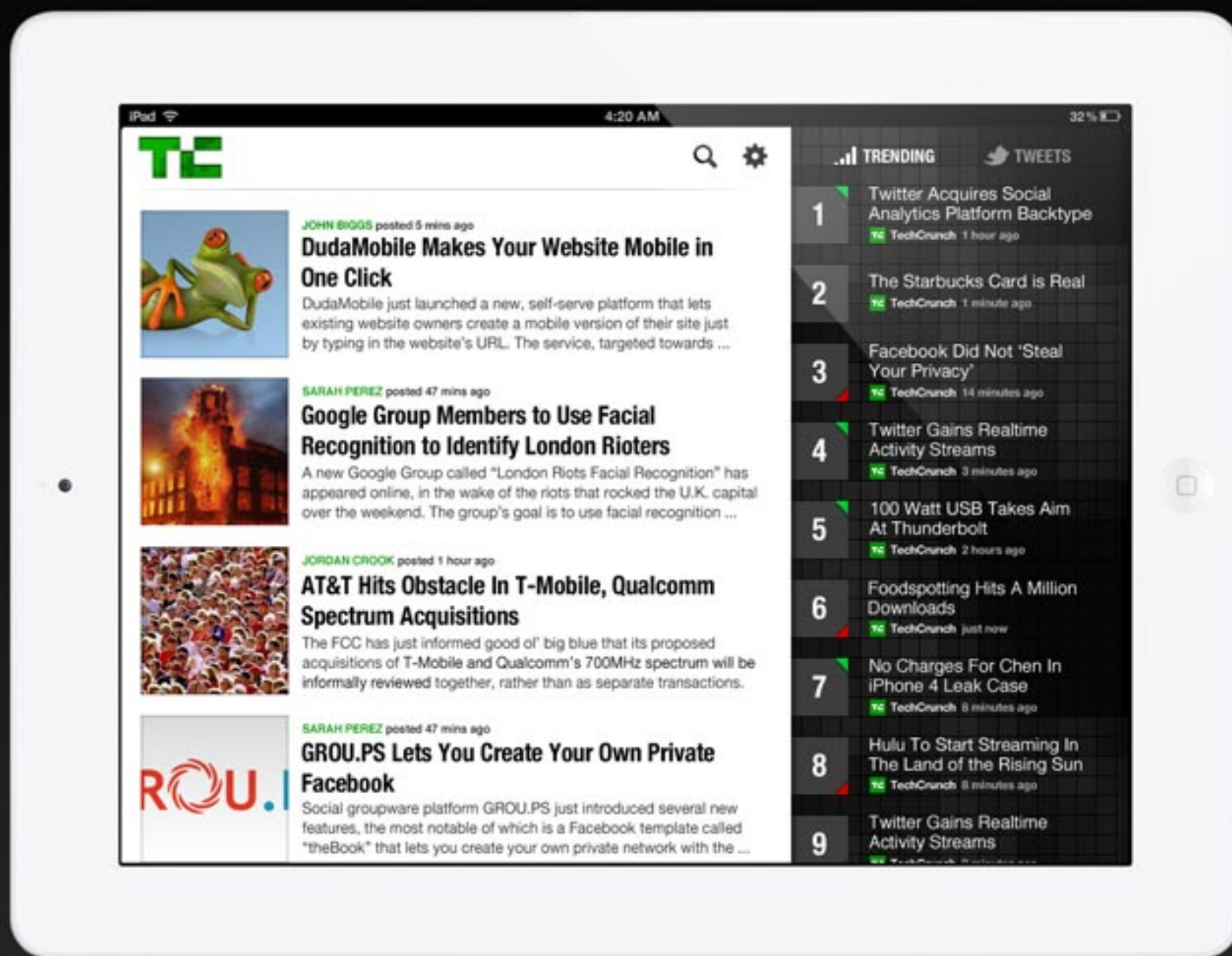
**APPLE UNLEASHED  
THE BEAST, BUT  
DOES THIS BIG CAT  
LOOK TOO MUCH  
LIKE A MOBILE OS?**





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08.03.12

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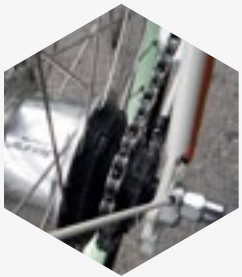
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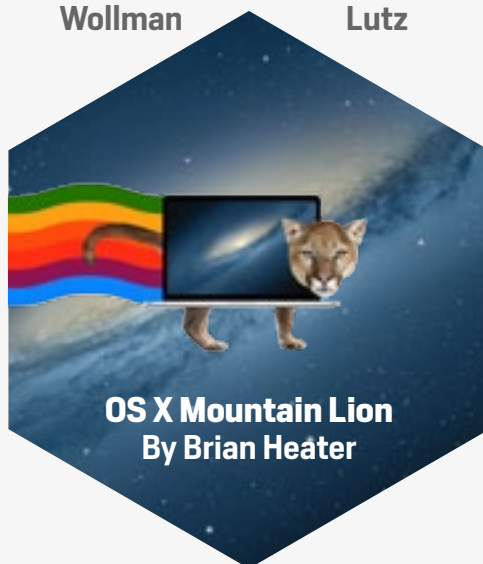
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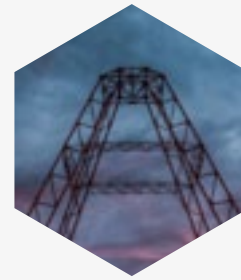


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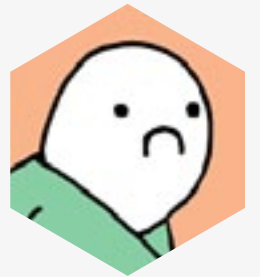
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# PATENT FIGHT!

DISTRO  
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EDITOR'S  
LETTER

**F**or two corporate entities whose successes are so inexorably linked, Samsung and Apple just can't seem to get along. The South Korean powerhouse delivers fully a quarter of all the components inside Apple's all-conquering iPhone, yet the company from Cupertino won't stop picking fights and so this week the two began a legal battle that will rock the industry — or at least the collective Twitter feeds of the industry.

The companies' sizeable teams of legal representatives began their posturing with opening arguments and some other fireworks. Samsung started taking heat early. Denied permission to include images of a concept device created before the iPhone, a device that shows the sort of all-glass style Apple contends it inspired, Samsung's counsel delivered those images to members of the media. Judge Koh didn't like that one bit and accusations flew that this was an attempt to corrupt the jury.

It's all a little tedious, so let's move on to more interesting things, like Google opting to indefinitely suspend general availability of the Nexus Q to "make it better." If you read my review you'll know that it's a fascinating device crafted with

amazing attention to detail but, lacking the kind of practicality a \$300 mass-market thing needs. So, the delay makes a lot of sense, hopefully giving Google engineers time to bake in local network playback and, if I get my wish, something akin to AirPlay. But, more interestingly, all those who pre-ordered a Nexus Q will still get them now, and for free. Yes, Google is shipping pre-orders without billing credit cards, which makes me think very few were pre-ordered indeed.

Microsoft rebooted its email offerings with the all-new Outlook.com. If you're like me, a sorry soul who spent many a workday mired in the desktop version, filtering through dozens of unnecessarily long email chains, that's a name that inspires no joy. But, put aside your memories of an oversized and underperforming application and go check out what is a blissfully light online email client. It's clean, simple, and if you don't take my word for it, check out Dana Wollman's exhaustive impressions, just a few pages away.

The new iPhone could be just a few weeks away. All at once numerous anonymous sources "confirmed" that it will be announced on September 12th




— presumably in San Francisco. Thanks to some component leaks we have a pretty good idea of what the thing looks like — thinner and bigger but not a drastic step away from the iPhone 4/4S in terms of styling. What is a major departure is the dock connector, a new 19-pin mini connector that looks to be roughly the same size as the now-ubiquitous micro-USB. In fact, we've been speculating that it may even be micro-USB compatible, at least for charging.

While that's all decidedly unofficial, Apple took the rather more official step of purchasing fingerprint sensor maker AuthenTec. While it's hard to not have images of highly secure, fingerprint-unlocking iPhones and iPads dancing through your head, AuthenTec is also a player in the contactless payment space.

The OUYA console has crossed the \$6 million mark with less than a week to go and celebrated with a few announcements. OnLive support will be there at launch, so gamers can get their streaming title support on the go. The company also showed off what's said to be the final controller, something that looks like a flattened, metal-hued Xbox 360 controller with a small touchpad sitting where the glowy Guide button would be. And, if that weren't enough, there'll now be a limited edition brown-colored console (Zune who?) and, most importantly, Square Enix has signaled its support by including *Final Fantasy III* as a launch title. RPG fans, get ready.

Remember how the international version of the Samsung Galaxy S III had its all-inclusive search box gimped by an OTA update? Well, a follow-up OTA push has re-enabled it. Enjoy it — while it lasts. We also got our first taste of the blood-red version of the AT&T GS III, which looks dark and mysterious, while that phone's hottest competition, the HTC One X, dropped to just \$99. It's a great time to be shopping for a new smartphone.

In this week's Distro we're giving you our full-fat review of Apple's latest release of OS X, version 10.8 Mountain Lion. Apple promises 200 updates to this release and Brian Heater did his damndest to touch on everyone of them. We also have that Outlook.com piece from Dana Wollman and Zach Lutz reviews T-Mobile's version of the plus-sized Galaxy Note. We have a trio of editorials for you this week, including the Distro debut of *This is the Modem World* from former Engadget Editorial Director Joshua Fruhlinger. We have a new IRL, more Recommended Reading and a Q&A session with HTC's Eric Lin. It's all waiting for you below, so make with the tapping. Those pages aren't going to flip themselves! 



TIM STEVENS  
EDITOR-IN-CHIEF,  
ENGADGET





# ENTER

DISTRO  
08.03.12

EYES-ON

## TDK BOOMBOX



### SWEET BEATS

**THE DESIGN:** It's not the newest kid on the block, but TDK's three-speaker Boombox has throwback style on lock. Featuring a 6-inch subwoofer and two 6-inch coaxial drivers, a USB port, a 3.5mm headphone jack and a 30-pin connector cable, it's no slouch in the specs department either. It may have a contemporary spin, but in keeping with its predecessors, this Boombox requires 12 D batteries to bump the jams without a cord.

**THE BILL**  
\$500







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# QUALCOMM SNAPDRAGON S4 PRO (APQ8064) MDP

We got our hands on Qualcomm's latest development platform to see how its first quad-core chipset fares. The APQ8064-based MDP easily beat the Tegra 3-based One X and Nexus 7, as well as the Exynos 4412-based Galaxy S III. And partly thanks to the Adreno 320 graphics core, the MDP even scored an astonishing 132fps in our GLBenchmark test, while the quad-core Galaxy S III with Mali-400 graphics came second with 99fps. Obviously, the question remains how big of a trade-off there is on battery life, but we shall see when APQ8064-based products become available later this year.

**PRICING:**  
TBD

**AVAILABILITY:**  
DEV-ONLY

**THE BREAKDOWN:**  
THE APQ8064 DOESN'T  
DISAPPOINT, AS THE S4 PRO  
ANNIHILATES THE QUAD-CORE  
COMPETITION.





# AT&T GARNET RED GALAXY S III

**While AT&T's been** flaunting a red, white and blue Galaxy S III lineup since launch, the carrier's exclusive Garnet Red handset's been rather elusive until recently, with pre-orders having begun on July 15 and deliveries just starting to roll in. If you've been eyeing Samsung's blood-red \$199 flagship, you'll be happy to know that we received ours and snapped a bunch of pictures, including comparison shots with the white and blue models. The phone is identical to its siblings other than the burgundy screen bezel and back cover, and the gunmetal rim running along its edge. It's a pretty gorgeous color scheme, if we do say so ourselves.

**PRICING:**  
\$199 (ON  
CONTRACT)

**AVAILABILITY:**  
NOW AVAILABLE

**THE BREAKDOWN:**  
THE RED-HUED  
VERSION OF THE  
FLAGSHIP HAS  
REMAINED UNDER  
WRAPS, BUT IT'S  
NOW READY FOR  
PRIME TIME.





DISTRO  
08.03.12

ENTER

HANDS-ON



# FARADAY PORTEUR E-BIKE

**When you first start** pedaling the Porteur, you receive little to no assistance from the lithium-ion cells lurking within the frame, but as you pick up your pedaling cadence, the power delivery increases. We had trouble pinpointing exactly when the bike started giving us a hand. You're hardly aware that the bike is pushing you along until you're zipping around at 20mph with minimal physical exertion. While the production model we rode wasn't powered, we still found it to be a slick set of wheels. The steel frame has zero flex, and was surprisingly lightweight though the batteries will, of course, result in some significant weight gain. **D**

**PRICING:**  
STARTING AT \$3,500 (PRE-SALE)

**AVAILABILITY:**  
2013

**THE BREAKDOWN:**  
THE PORTEUR WAS A PLEASURE TO RIDE AND CUSTOM ALGORITHMS OFFER A SMOOTH TRANSITION TO E-BIKING.



# Money, Money, Money! It's Earnings Time Again

SOURCE: GOOGLE, APPLE, MICROSOFT, SAMSUNG

**It didn't report** the Earth-shattering profits that it did in Q1, but Apple's still topping the charts of tech heavyweights in this quarter's round of earnings reports. Cupertino brought in \$8.8 billion in net profit, followed by Samsung with roughly \$4.96 billion, Google with \$2.79 billion and Microsoft with a loss of \$492 million. While Apple may not have reached its previous heights, Q3 was a record breaker for the quarter, nonethe-

less. Meanwhile, Samsung's operating income was up 79 percent over the same time last year, a number it attributes to its smartphone business. Google may not be the big earner that Samsung and Apple are, but it managed to beat expectations and had a year-over-year increase in revenue of 21 percent. Microsoft, on the other hand, reported a net loss of \$492 million, but annual revenues were up \$3.76 billion over 2011. — *Christopher Trout*

## FINANCIAL RESULTS FOR QUARTERS ENDING JUNE 30TH AND MARCH 31ST

2012

2011

### GOOGLE

Its 21-percent increase in revenue over the same quarter last year owes largely and unsurprisingly to advertising and "other," which account for \$10.96 billion.

### MICROSOFT

Redmond's \$492 million net loss was reportedly due in part to a one-time "goodwill impairment charge" associated with the collapsed, \$6.2 billion aQuantive deal.

### APPLE

The company reportedly shipped 17 million iPads last quarter — an 84 percent increase over the same quarter last year — but the iPhone is still its biggest earner.

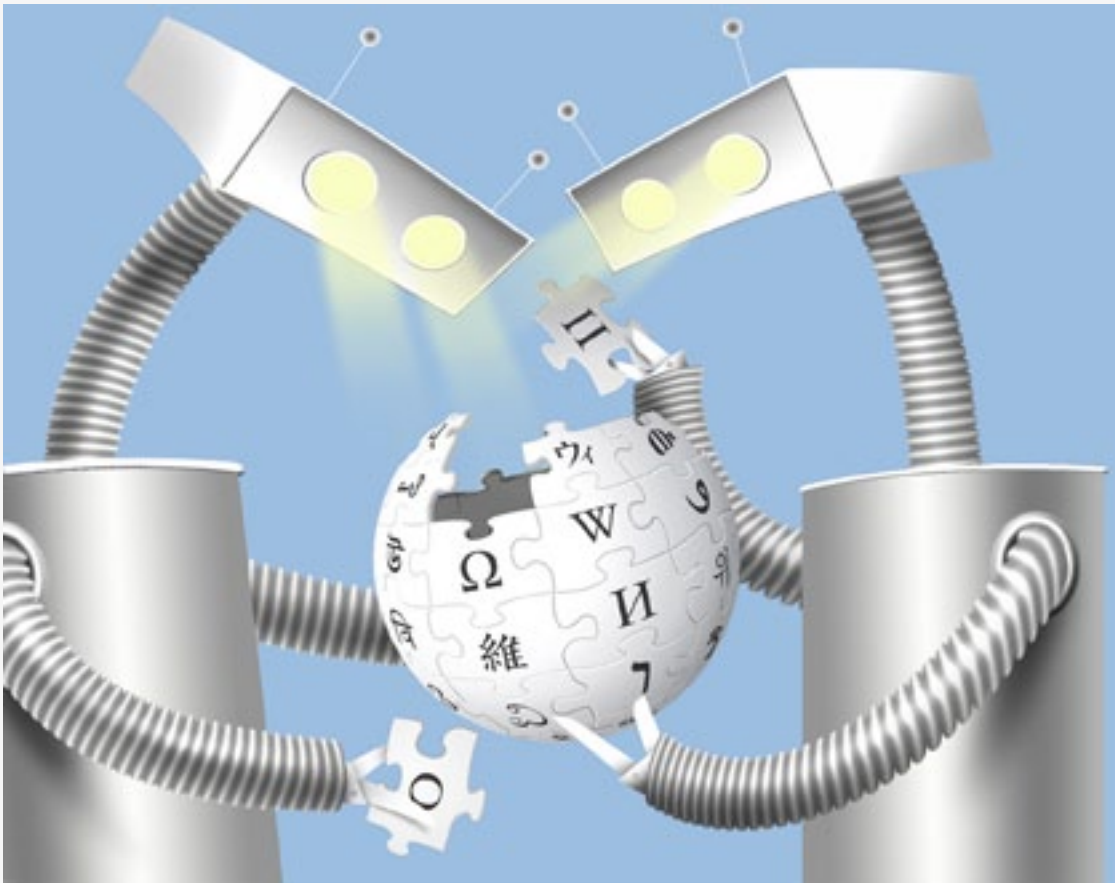
### SAMSUNG

Sammy gave special shout-outs to the Galaxy S III and Galaxy Note for pushing its money-making smartphone business forward.

\*Accounting practices and fiscal calendars may vary from company to company.







## Meet the 'Bots' that Edit Wikipedia

By Daniel Nasaw  
*BBC News Magazine*

**Wikipedia is famously** edited by thousands of volunteers who are constantly writing new entries and updating existing ones, but as Daniel Nasaw reports in this piece for *BBC News Magazine*, they receive quite a bit of help from some largely unsung assistants. Hundreds of bots, or autonomous computer programs, are also constantly hard at work: monitoring and cleaning up the site, and performing countless mundane tasks that would be virtually impossible for human editors to manage. More controversially, they've also sometimes been responsible for creating new entries based on raw data — a point of contention for some of the site's human editors. According to the bot minders, though, they apparently don't have to worry about being completely replaced anytime soon.

ILLUSTRATION BY RAY BARTKUS



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**OS X 10.8 Mountain Lion:**  
**The Ars Technica Review**  
by John Siracusa

*Ars Technica*

Still looking for more on the latest OS X release following our own coverage this issue? Then you'll find few reviews more exhaustive than John Siracusa's always-anticipated take for *Ars Technica*. Clocking in at 26,000 words, it leaves almost no new feature unexamined, but it also doesn't avoid looking at the bigger picture. Naturally, it's also available in e-book form.

**Microsoft's Lost Decade**  
by Kurt Eichenwald

*Vanity Fair*

It's prompted plenty of debate and criticism (including from Microsoft itself), but as with all such stories that make the rounds it's important to go back to the source, and this one certainly provides lots to chew on. That includes some news like Microsoft's work on e-readers as far back as 1998, as well as a rather extraordinary look inside the company itself, drawn from various documents and interviews with dozens of current and former employees.

**Apple vs. Samsung:**  
**The Complete Guide to**  
**a Billion-Dollar Trial**

by Matt Macari and Nilay Patel  
*The Verge*

There's been plenty written about the Apple vs. Samsung trial already, and undoubtedly plenty more to come, but those still uncertain about what's involved and what's at stake likely won't find a more complete primer than this one. Notably, it includes a detailed look at the patents in question, explained in non-lawyer speak.



# DO YOU SMELL THAT?

DISTRO  
08.03.12

FORUM

THIS IS THE  
MODEM WORLD

BY JOSHUA FRUHLINGER

**THERE ARE TWO GADGET SCENTS:** one triggers happiness and anticipation, the other conjures sadness and fear. ¶ The first arrives like an emotional bullet as we open the box. That plasticky odor wafts in with promised adventures, teases an initial power-up and floods us with curiosity and excitement. ¶ The second shows its ugly head when electronics give up the ghost. That smell — you know that smell — of melting circuits and digital death sends us into a spiral of data-loss panic, guilt and fear for our safety.

Normally, our gadgets don't stink, and that's how we like them. Numerous attempts to give smell-o-vision the place it (arguably) deserves in human-computer interfaces haven't done much for us — we simply don't want smelly gadgets.

But our electronics' two most important moments in their binary lives: birth and death, are laced with a myriad of odors that produce real mental and emotional responses. Could this

possibly explain some — even a little — of our irrational addiction to the act of ripping open boxes and installing things that plug in? Do we get off on opening boxes, of smelling the fresh electronics?

Smell is unique in that it passes its information straight into the memory cortex. Scent is a human SATA III interface, if you will: quick and efficient. Scents trigger memories and subsequent emotions with a speed and fe-





# Cutting through the weapons-grade transparent shell, surgically stripping the protective bits, revealing the shiny plastic and then — there it was — that smell.


rocity that we rarely see coming. Walk into your childhood home after a semester at college and the second thing you'll do after having a gawk at your poster of Terri Nunn (look her up) is get a big, fat waft of childhood memories.

Not surprisingly, my favorite gifts were always the ones that plugged in or required batteries. Cutting through the weapons-grade transparent shell, surgically stripping the protective bits, revealing the shiny plastic and then — there it was — that smell. Wafts of factory air, fresh plastic, warm silicon and a bouquet of synthetic olfactory pangs delivered me unto electronic rapture. What followed was a delicious day spent fighting aliens, winning wars to end all wars and updating my MP3 collection.

Then came those moments when my toys would give up their little gadget ghosts. The reek of burning plastic triggered a panicked scramble to rip plugs out of the wall and jettison batteries. Then,

a reluctant sniff of the device and a quiet wait for it to cool down (Maybe it just overheated?). Then the guilt. Oh, the guilt: Was it my fault? Did I use the wrong power supply? Did I start a fire? Will mom be pissed? Were the batteries bad? Did it get wet? Distraught, I'd gingerly turn it back on only to find that yes, it was dead. Gone forever. Unrecoverable error.

But that smell of electronic death remains. When I get wind of house fires, the first thing I pick up on is that caustic electric fire note: burnt plastic, toxic fumes, digital death. It's unmistakable, and I hate it.

Then I wander into a shop just to smell the new electronics. A cocktail of chemicals, solvents and glues replaces remorse with hope and promise. I fondly remember my Starbird, the best toy ever made. I imagine I'm playing Snake on my Nokia 6160. I visualize a heaven of unboxings and boot-ups. Things will be okay. 



# SHEDDING DEAD SKINS

DISTRO  
08.03.12

FORUM

SWITCHED  
ON

BY ROSS RUBIN

**A**PPLE AND NOKIA DON'T seem to have much in common these days apart from participating in the global smartphone market. While the former may not have the broadest product line, it's riding high in the PC, tablet and TV accessory markets, whereas the latter is fighting to make a comeback in the handset market it once dominated. But while their rationales might be different, both companies are providing more value to their users

by focusing on differentiation via software and services rather than trying to make over user interfaces.

When Nokia cast its lot with Microsoft it negotiated a "best of both worlds" deal, in which it was free to change just about anything in Windows Phone that it wanted. It was a condition that other Windows Phone licensees, such as HTC, would have loved to enjoy. But Nokia sought constraint, citing a need to preserve UI consistency with other Windows Phone devices and avoid the dis-

ruptive variation seen in Android smartphones. Rather, as far as product went, Nokia would differentiate with its own apps, many of which were tied to services, such as Nokia Maps, Nokia Drive, Nokia Transit, Nokia Music (which provides ad-free streaming radio) and the augmented reality app City Lens. How some of Nokia's attached cloud services complement or compete with Microsoft's own serious cloud-based initiatives has surely been the subject of many meetings between the two companies,





While their rationales might be different, both companies are providing more value to their users by focusing on differentiation via software and services rather than trying to make over user interfaces.

but the apps round out and enhance Nokia's offerings.

Apple doesn't have much concern about fragmentation on the Mac, but like Microsoft, it does have an interest in maintaining a certain level of consistency across its platforms. This is certainly true from what developers see under the hood, although it must be balanced against optimization for input methods and form factors in the user experience. When Apple brought over Launchpad and full-screen apps from the iPad to the Mac, it was a far cry from the kind of sweeping changes

Microsoft is creating with its Metrofied Start screen, but Switched On observed it as a move that benefitted new users to the Apple ecosystem while potentially alienating old Mac fans.

An enhanced Launchpad and full-screen apps are still around in Mountain Lion, but Apple has shifted focus somewhat in the latest major OS release. Yes, it is still borrowing from iOS (as iOS borrows from the Mac), but what it has brought over has been cloud-synced apps such as Notes and Reminders as well as a notification feature that now surpasses Windows'. These, along with the internet-driven features of Share sheets and Documents in the Cloud, are features offering new choices to users who are content within the Apple ecosystem and don't need the extensive multi-platform support of services such as Evernote and Dropbox. This is all achieved with nominal changes to the user interface and functionality that is more likely to be appreciated by old users and new users alike.

While Nokia launches upon another's platform and Apple upon its own, the conclusion is the same. For better or worse, platform vendors tend to have de facto control over today's user experiences. Apps, and the services to which they connect, are a more worthwhile quest than stretching a user interface beyond its design, because they can unlock far more valuable spoils than a cosmetic identity. <sup>D</sup>



# A WEEK BETWEEN BLOCKBUSTERS

DISTRO  
08.03.12

FORUM

REACTION  
TIME

BY LUDWIG KIETZMANN

**T**hanks to a polite and fiscally beneficial agreement between movie studios, you've been saved from seconds of indecision this weekend. Had *Total Recall* and *The Bourne Legacy* stuck to a shared release date, you'd have become a seated participant in an extravagant and mutually destructive showdown. Between Colin Farrell and Jeremy Renner, who would you give your \$12 and two hours?

If you're a movie buff, you might not even hesitate spending time and money on both consecutively. But what happens when you bump up the price to \$60, and extend the temporal investment to something between eight and 80 hours? Now you see the dilemma squeezed in-between this holiday's most anticipated shooters, *Halo 4* and *Call of Duty: Black Ops 2*, and all of a sudden one week doesn't seem like much of a buffer at all.

A week of spacing between *Total Recall* and the Bourne franchise is enough to calm hyperventilating Hollywood executives, who routinely tell each other to back off — years in advance. Don't even think about perching on November 20th, 2015, because that already belongs to

*The Hunger Games: Mockingjay Part 2*. Yes: 2015! If opening weekends are such a coveted currency for films, imagine how valuable they are for video games.

If a game is elaborate enough to borrow the term "blockbuster," the heavily marketed launch week is likely to be the most important period of its life. If it doesn't make a splash on day one, it runs the risk of disappearing in the ripples of the next release. *Halo 4* has claimed November 6th with confidence, but its proximity to the latest *Call of Duty*, launching just one week later, is cause for concern.

It's silly to envision this as a slugging match between Microsoft's sci-fi juggernaut and Activision's futuristic spin on *Call of Duty*. The latter obviously benefits from a larger audience spread across multiple platforms (whereas *Halo 4* is exclusive to Xbox 360), and has sustained annual appeal in much the same way that sports franchises like *Madden NFL* have. I, much like other die-hard gamers, will likely end up buying both.

People like me, however, aren't representative of the majority, who operate with a limited pool of funds, likely reserved for games that can guarantee good, albeit familiar, bang for the buck. It's not





that *Halo 4*'s \$60 price is problematic on its own, but that a fan of first-person shooters will have to consider making a second, equally expensive purchase one week later. Put another way: there's only so much oxygen in the room, and *Call of Duty* takes deep breaths.

Microsoft usually pairs *Halo* with a September launch date, well outside *Call of Duty*'s commercial kill-zone. The development of *Halo 4* has either precluded a traditional September finish, or inspired enough faith to nullify fear of the competition.

Though it may not be deliberate competition ("We must destroy Master Chief this year!"), there's only so much time, money and attention to go around. Both games will vie for longevity with extended multiplayer support, and *Halo 4* also promises episodic expansion of its robust cooperative mode. The features are solid and plentiful enough to suggest that if *Halo 4* ends up burned by *Call of Duty*, it won't be because of inherent failures. Packing "AAA" games this closely together just leads to ugly situations and tough choices for consumers.

If there's a lesson to be extracted from Hollywood, then, it's that publishers should be more mindful of the whole calendar, and opt for more collaborative, coordinated release dates throughout the year. *Call of Duty* has no reason to get out of anyone's way, of course, but even it would benefit further from a more consistent industry-wide release schedule. And if you must launch something similar near a game as big as that, maybe give it a berth wider than one week. **D**

## 4 NEW GAME RELEASES FOR THE WEEK OF AUGUST 3RD



Click  
on game  
to buy

**KINGDOM HEARTS 3D:  
DREAM DROP DISTANCE**  
Nintendo 3DS - \$40



**DEADLIGHT**  
(Xbox Live Arcade) - \$15



**ORCS MUST DIE! 2**  
(PC) - \$15



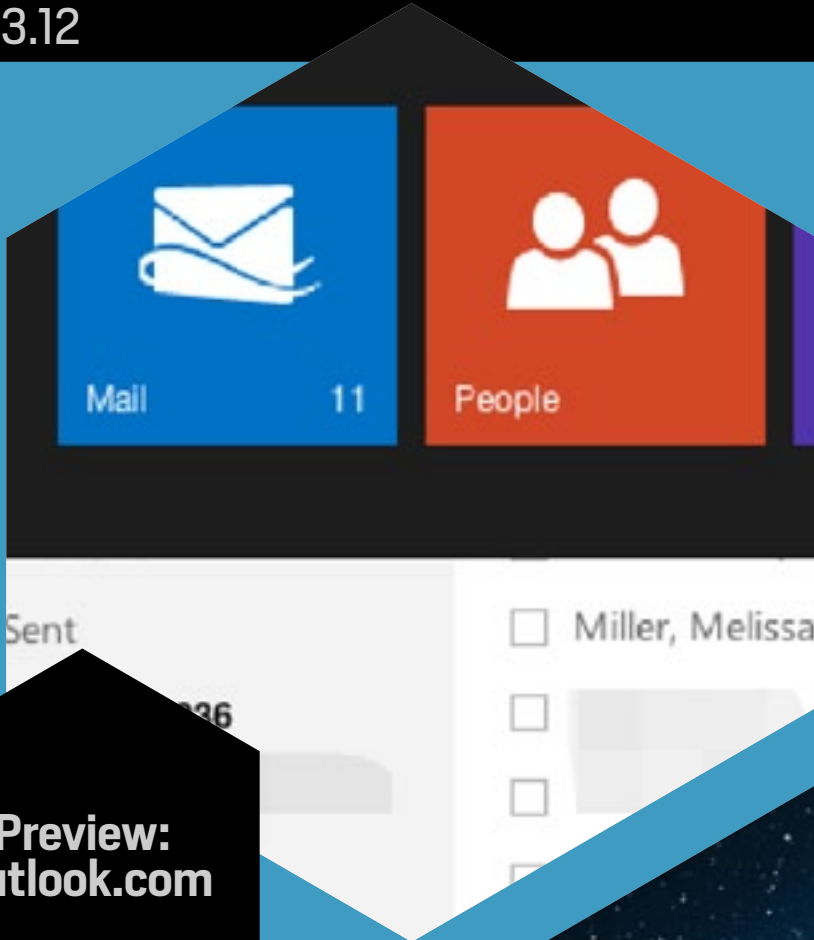
**THE BOOK OF UNWRITTEN TALES**  
(PC) - \$18



# REVIEW

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Outlook.com



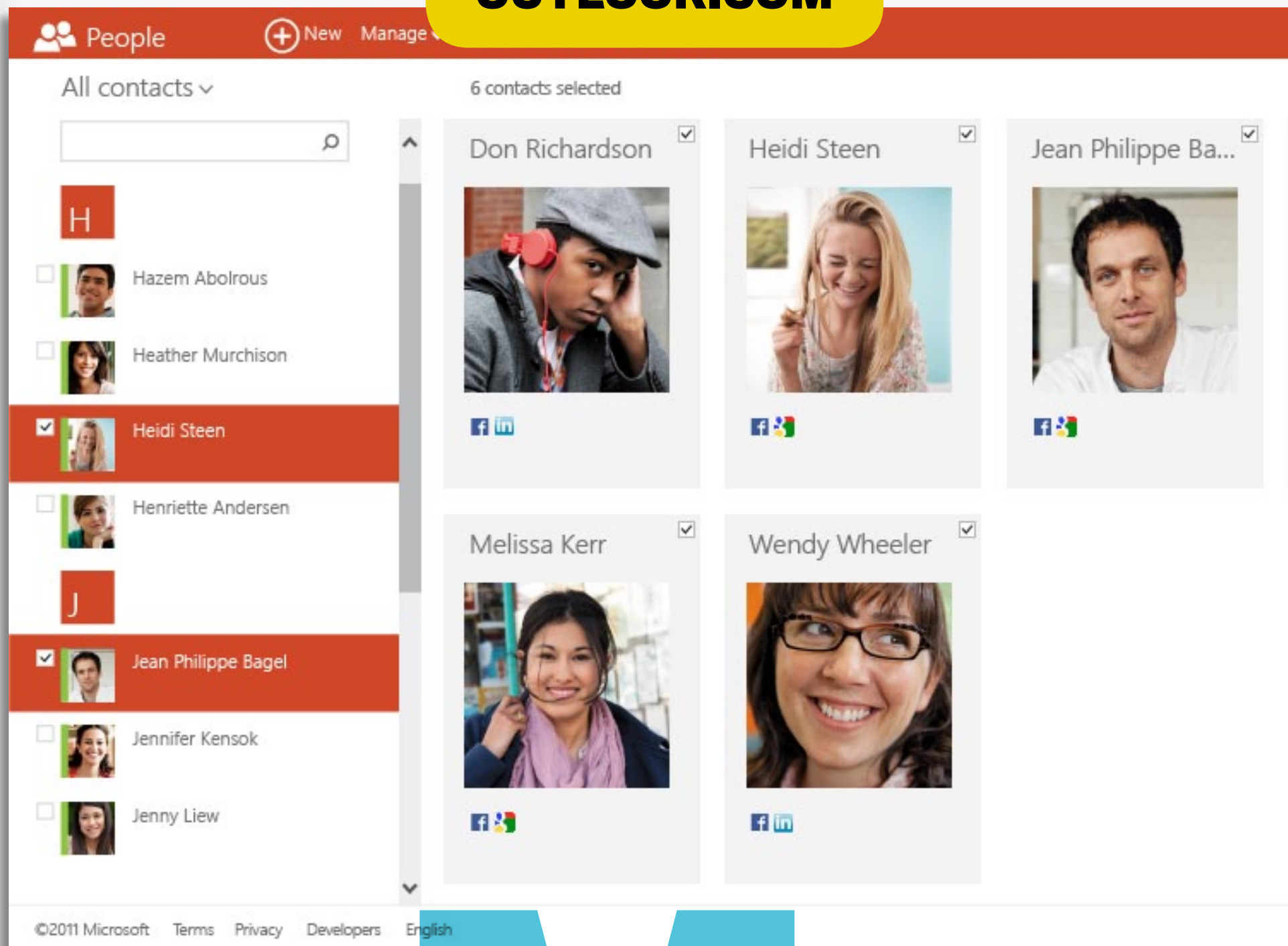
Samsung  
Galaxy Note  
for  
T-Mobile

OS X  
10.8  
Mountain  
Lion





## OUTLOOK.COM



Microsoft's going after Google's user base with its new and improved Gmail contender. But, is **Outlook.com** worth making the switch?  
By Dana Wollman

**Maybe you heard,** but Microsoft launched a new email service this week. No, not Hotmail — a completely new, built-from-scratch service. This is Outlook.com, and for the time being, at least, it will exist separately from Hotmail. So why didn't Redmond just give Hotmail a drastic overhaul? Well, friends, there are two explanations. First, the polite one: for technical reasons, the engineers found it easier to build a new service from scratch rather than retrofit the old one. The frank answer: Microsoft is keenly aware Hotmail has a bad rap, thanks to those banners and flashy video ads. In



fact, the company has been very candid that it wants not just to compete with Gmail, but siphon away some of its growing user base. As such, Outlook offers a fresh, minimal interface — far cleaner than Hotmail ever looked. What's more, the ads are more pared-down here: no video adverts, and no targeted ads on messages between people (newsletters are still fair game).

The service is open to the public as of this week and you get virtually unlimited storage, along with 7GB of SkyDrive space if you create a new Microsoft account. (Microsoft uses the word “virtually” to hedge itself against spammers who might otherwise use limitless storage to game the system.) And you should take our word when we say it's worth giving the service a shot: we've been testing it for almost two weeks.

## A CLEAN DESIGN

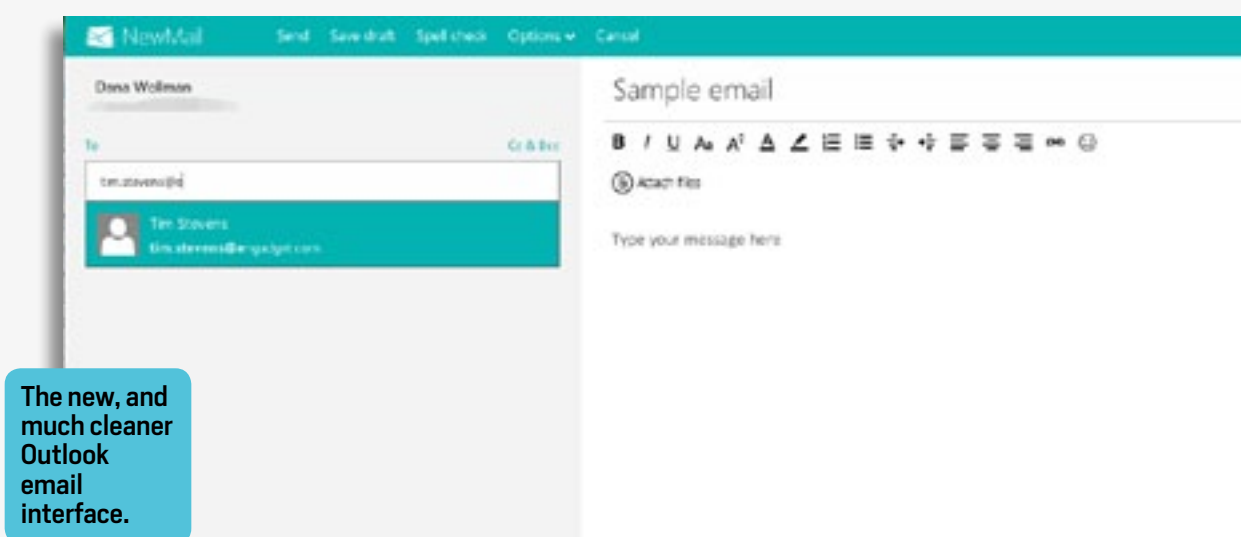
It takes a special kind of nerd, perhaps, to get giddy over a new email service. Throughout testing, I pulled various co-workers aside, asking them to stop what they were doing and see how much cleaner this new service looked compared to Hotmail. “It's pretty,” they said. “Also, it looks like Gmail.”

And in a way, that's the point. In conversations with company reps ahead of the

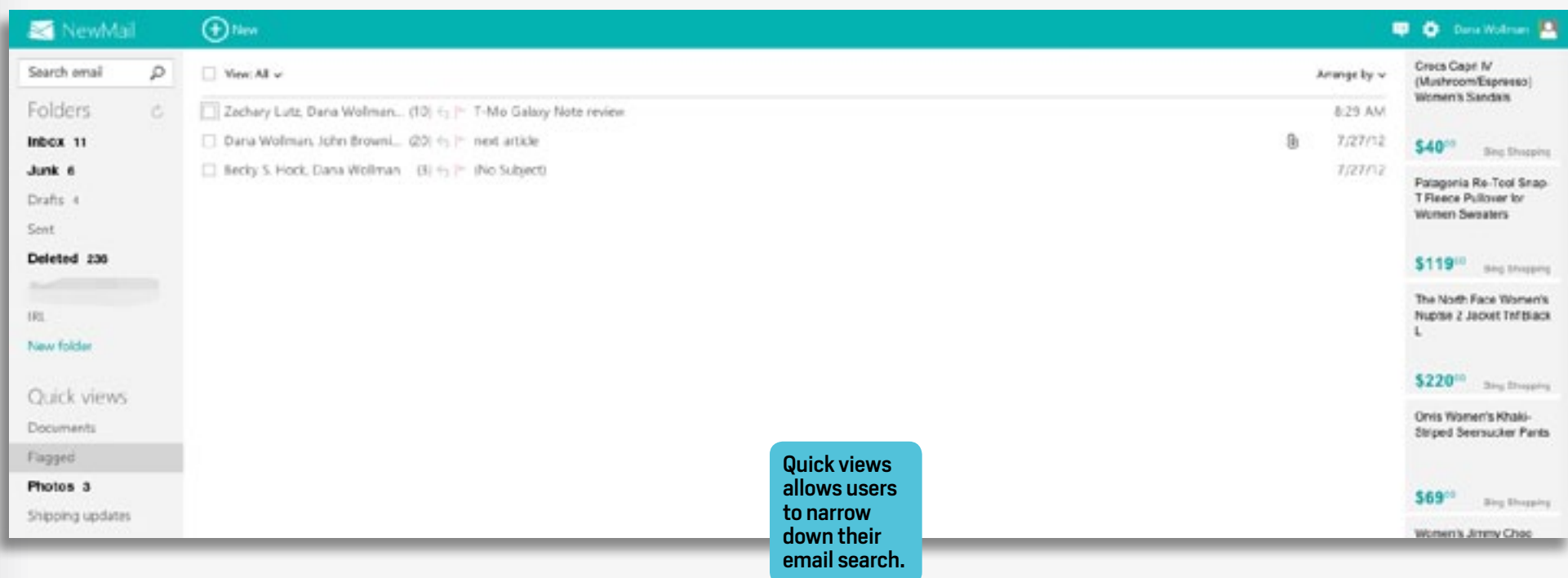
launch, it was obvious that Microsoft is not just aiming to distance itself from Hotmail's bad rap, but to take a bite out of Gmail's growing user base. The company is quick to point out, for instance, that the header contains 60 percent fewer pixels, making room for 50 percent more emails on a page. Another stat the company shared with us early testers: in a survey of current Gmail users, 80 percent said they would consider switching. Tellingly, Microsoft did not include Yahoo Mail users in its focus group.

In any case, whatever the inspiration behind Outlook.com's minimalist feel, it's utterly pleasing to look at. Gone are the display banners and flashy ads with embedded videos. In their place, a home screen with most of the space given over to the emails themselves. As in Outlook 2013, which also just launched in pre-view, many key buttons like delete, flag and “mark as read” don't show up unless you hover over an email with your mouse. Again, “clean” is the word here.

To the left there's a narrow pane, where you'll see your various folders stacked on top of one another. We partic-







ularly dig “Quick views,” which filter down your inbox to specific (and highly customizable) categories, like emails with photo attachments. (You can always collapse these menu trees if you want even less clutter.) There’s also a search field over there, in case you want to find a long-lost email. On the right side of the screen, there’s another narrow pane, this one filled with discrete advertisements (more on that later). Up top, there’s a high-level menu, and Microsoft wasn’t kidding when it said that area had been pared-down. From there, you access things like your calendar, SkyDrive or People hub, but that’s all hidden behind a neat arrow sign. That’s a stark contrast from Gmail, which lists its other offerings prominently at the top of the page.

The nice thing about that high-level menu is that the options change depending on what you’re doing. So, if you’re looking at deleted items, you’ll see a prompt to empty the folder in one fell swoop. If you’ve opened a message, the options expand to include reply, delete,

“Move to,” etc. Wherever you are, there will always be a shortcut for starting a new email. (Bonus: it has a large, finger-friendly icon next to it, making the site slightly easier to use on phones and tablets.) That’s ultimately a more efficient approach than Google is taking with Gmail, where the email options, search field and top-level tabs (Documents, YouTube, etc.) each have their own row. In Gmail, then, the list of messages starts further down on the screen, and you ultimately don’t see as many on a page.

## LIMITED ADS

As Microsoft seems to have discovered, you can’t pull off clean web design without seriously rethinking the way you present ads. For starters, you won’t find any distracting video advertisements on Outlook.com. In fact, all ads must adhere to a template, which will give them a uniform look, regardless of whether they’re shilling Thai food or yoga pants. (Yes, kind of like Apple’s iAd platform.)

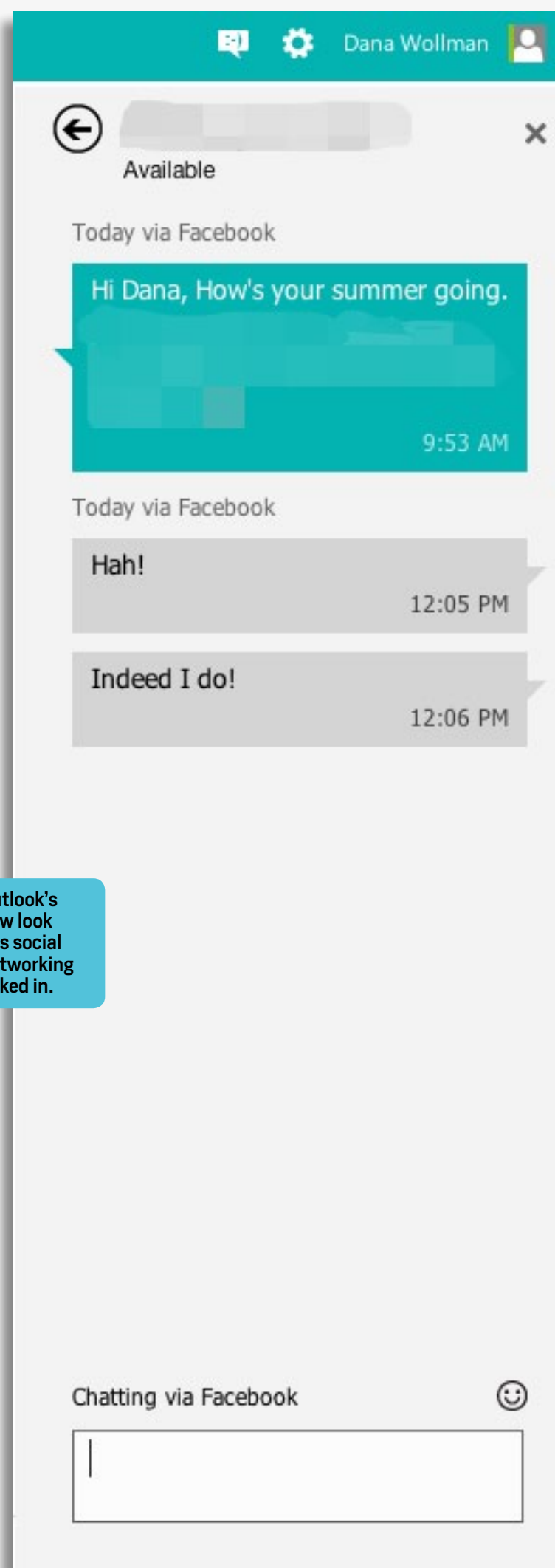


And, in a pointed departure from Gmail, you won't find any targeted ads in emails between people (newsletters and the like are still fair game). How does Microsoft know you're a human? Partnerships. Several of them. The company has been working closely with Facebook, Twitter and LinkedIn, making good use of their massive user databases. Chances are, if someone sends you an email, one of those three sites will recognize that address and be able to confirm there's a real person sending that message. We'll admit, we're a little skeptical that using Twitter will help, just because the site is already overrun with spammers, but this otherwise seems like a smart approach.

Indeed, we didn't notice any ads on emails to friends and coworkers, and the ads we did see were discreet and fairly generic (think: cafés and tanning salons). If you bother to click, you might find that some of them aren't even relevant; in one instance alone, we saw ads for three restaurants in Virginia, four states over.

## BUILT-IN SOCIAL NETWORKING

So you won't see any ads alongside your emails to your buddies. But that blank space to the right of your message has to be used for something, right? (Just say, "right.") Instead of ads, you'll find Facebook and Twitter baked right into the UI, allowing you to peek at recent status updates from whomever you're messaging with. (Don't worry, it's okay if your Twitter and Facebook accounts aren't tied to your Hotmail, Outlook.com or



Outlook's new look has social networking baked in.





Live.com address.) In the case of Twitter, you can actually retweet someone right from Outlook.com without having to go to Twitter's site or open TweetDeck. From Facebook, you can like or comment on someone's post. All told, this feels very similar to Outlook 2013, which just launched in preview earlier this month — that, too, has Facebook and LinkedIn built in so that you can glance at what your contacts are up to.

## PERSONALIZATION OPTIONS

Want a ninja theme for your inbox? Stick with Gmail. Though you can personalize the site, you won't find any loud background patterns here; just 12 solid colors, available from the small settings icon in the control bar at the top of the screen. Though it's a small detail, we particularly love that as soon as you click the settings button, you'll see a small pop-up with the various color choices, among other options. Hover over any color to preview how it looks. All in all, it's much easier than with Gmail, where you have to drill into the settings menu, away from your inbox, and can't preview any changes.

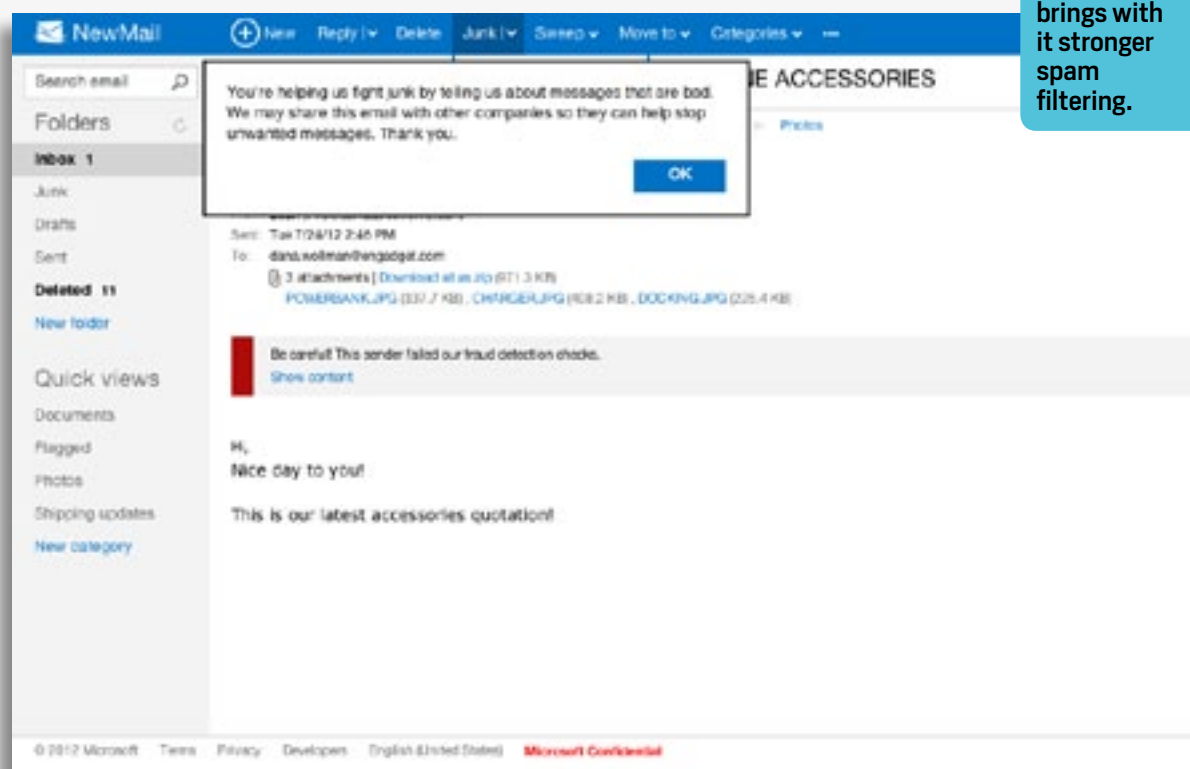
If you like, you can also add a reading pane on the bottom or right part of the screen to make

Outlook.com look more like Outlook, the desktop app. You can also change the language by digging into "More mail settings" (there are 106 to choose from at the moment).

## OVERALL PERFORMANCE AND SPAM CONTROL

In general, this early build of Outlook.com feels stable, though it's not without bugs. For instance, there were times when we couldn't delete a message from the inbox, and had to open it first in order to trash it. We brought the issue to Microsoft's attention and a rep assured us the problem would be fixed by the time the service opened to the public, so chances are you'll have a smoother experience.

Otherwise, if we have one quibble, it's that when you respond to an email, your response shows up as an unread email. We offered this as feedback to Microsoft as well, though no word on whether it will heed our suggestion.



Knock on wood, we haven't been seeing any spam turn up in our inbox. Take note, though, that in the beginning, at least, you'll be asked occasionally to stop what you're doing and prove to Microsoft that you yourself are not a spammer. You'll know this is happening to you when you hit send and are prompted to complete a CAPTCHA test to verify that you're a real person. According to a Microsoft rep, this reputation-building phase will eventually peter out, and you can build credibility faster by verifying your cell phone number, something spammers don't usually do. Still, it's unclear how long you might have to put up with these periodic interruptions, and Microsoft also isn't saying whether certain behavior (e.g., sending too many emails in a short period of time) will make it more likely that you'll get stopped and frisked by the spam police.

Oh, and in case you're wondering, SSL is turned on by default here. That's true in Gmail, too, but unfortunately, the same cannot be said of Hotmail.

## WHAT YOU GET

In Outlook.com, the storage is "virtually" unlimited, to use Microsoft's words. (The company won't fully promise unlimited storage, since it needs a way to hedge against spammers.) That compares with 10GB of free storage on Gmail. Not bad, eh? Also, as you might know, every Microsoft account comes with 7GB of SkyDrive storage, so that's what you'll get if you're new to the company fold. Also,

anyone can sign up; you don't need an invitation, and there's no limit to the number of people allowed to test the service in its preview stage.

## GETTING STARTED

**CREATING AN ACCOUNT:** If you already have a Hotmail account, you can upgrade by clicking Options in the upper-right corner and selecting "Upgrade to Outlook.com." Once you make the jump, you can always revert back to the old service if you feel more comfortable there. For now, the two services will exist separately, and according to Microsoft, that will be the case for the foreseeable future. Interestingly, the company isn't promising that it won't ever force you into an Outlook.com upgrade, but it would seem, at least, that this isn't the plan for the near term.

## COMING OVER FROM ANOTHER

**EMAIL SERVICE:** If you're transferring over from Gmail (and Microsoft sure hopes you are), you can skip straight to Outlook.com and create an account. You'll also need to go into Gmail settings and set up forwarding. (By default, Gmail keeps a copy of your incoming messages. It's your call if you want Google to mark them as read, archive them or just leave them sitting there, unopened.)

Once we did that, we had no problem importing our contacts list, which we'll discuss in more detail down in the "Email Features" section. If you would prefer, you can use POP to import all your old email. You can also program Gmail key-





board shortcuts if you go into the full settings menu.

Still, our experience transitioning from Gmail to Outlook.com wasn't completely smooth: our labels didn't come with us, and whenever we responded to a message from Gmail, our response didn't sync with Outlook.com.

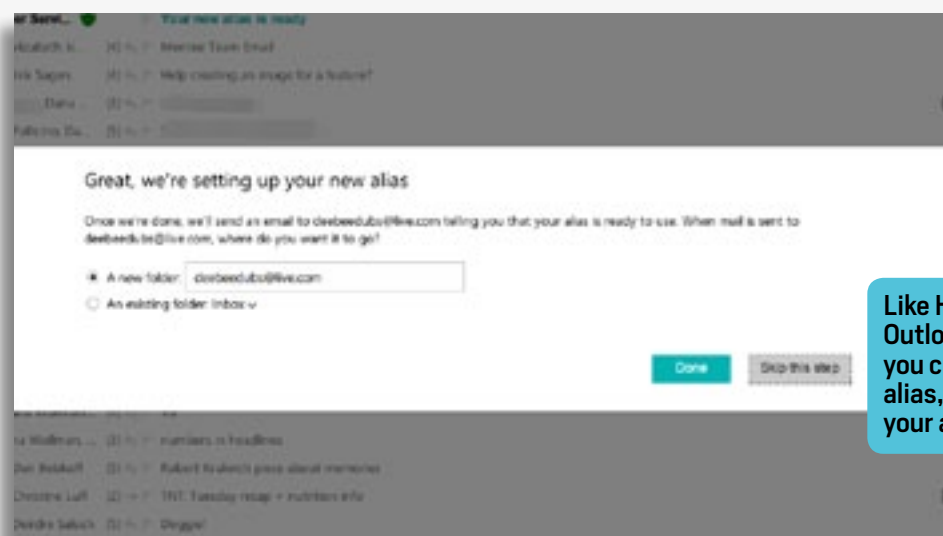
## EMAIL FEATURES

If you're wondering why we're only now starting to talk about email features, it's because they're not very different from what you'll get in Hotmail. Since the real story is the fresh UI and the new approach to ads, we decided to get the look and feel bit out of the way first. That said, if Microsoft succeeds in luring away some of Google's users, it's worth recapping what features Hotmail and Outlook.com have to offer.

As in Hotmail you can use the Sweep feature to automatically delete, file or forward certain kinds of messages as they arrive. This comes in particularly handy with things like daily deals and newsletters, which can easily clog up your inbox if you're not careful to read them right away. For instance, then, you can tell Outlook to delete Groupon emails that are more than four days old, or to archive that monthly newsletter with 30-minute recipes (hey, you might try them out *eventually*). Other kinds

of rules: emails from your baseball coach go to a "Baseball folder," while Facebook notifications get sent to the trash. As for high-priority items, you can keep them fixed at the top of your inbox (you can do something similar in Gmail as well).

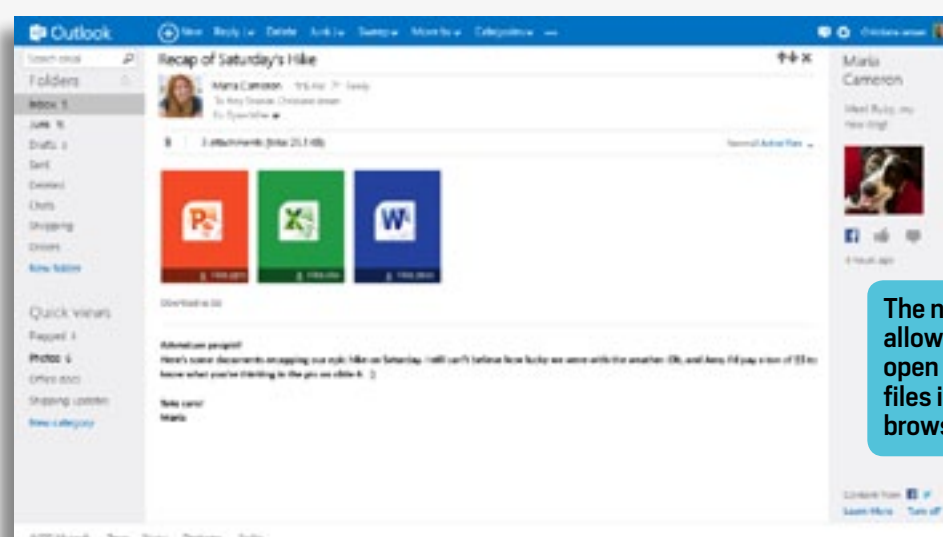
When it comes to unwanted mail, you can select "Unsubscribe" from a drop-



Like Hotmail, Outlook lets you create an alias, tied to your account.

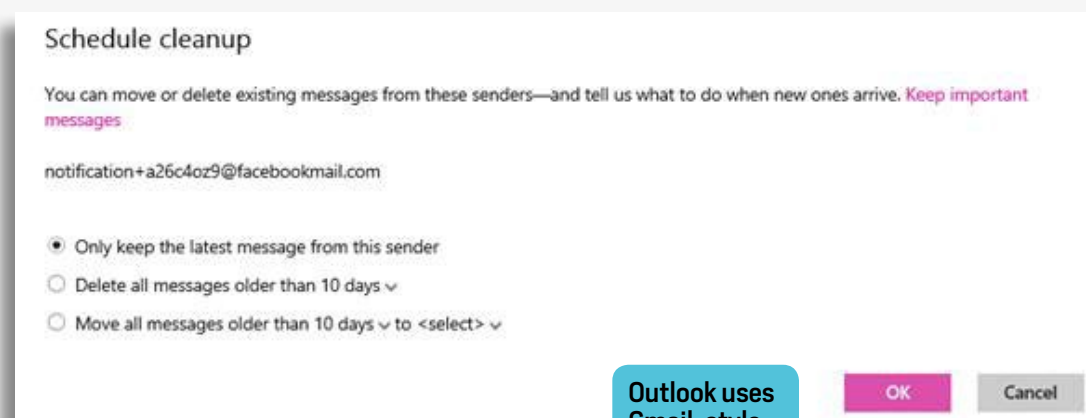


Syncing contacts is easy through the People Hub.



The new UI allows you to open Office files in the browser.





down menu and you'll never see emails from that company again, even if you somehow end up back on the mailing list again. Naturally, you can mark things as junk, but you can also select an option that says "Phishing scam" or "My friend's been hacked!" — both of which you can do in Hotmail as well.

It would be incorrect to say there's no file attachment size limit in Outlook.com, but the max size is certainly higher than Gmail's: 300MB versus 25MB. *But*, that number assumes you're uploading attachments from SkyDrive; if you're uploading from anywhere else, the file limit drops to 100MB. By default, Outlook.com will check for missing attachments when you're sending a message, though you can turn this feature off if you're so inclined.

Like Hotmail, Outlook.com has so-called Active View, which lets you open slideshows, YouTube clips and other attached media files from within the inbox. Open a batch of photos for instance, and they'll appear as a big overlay on your screen, allowing you to click through pictures instead of making you open them in a new tab or download

them. Additionally, you can open Office files (Word, PowerPoint and Excel) in the browser, even if you don't have Office installed locally.

One neat thing you can do in Outlook.com as well

as the older Hotmail service is create an alias — a separate email address that's tied to the same parent account. When you set up a new alias under either the Hotmail.com or Live.com domain, that email will live in its own folder within your main inbox, so you don't need to sign out and log in again. That's a handy thing if you use a secondary email address for newsletters or online shopping, but still want to peek in at your mail from time to time.

Like any mobile OS worth its salt, Outlook.com is smart about pulling in information about your contacts from various sources. From the People hub, accessible from the top left corner of the main screen, you can link your Google, Facebook, Twitter, LinkedIn and Sina accounts. Once you've entered the requisite log-in information, your contacts will quickly populate. If you know someone through multiple networks, you won't see duplicate entries; just a single card with all of that person's info in one place.

## CONVERSATION VIEW

It was a pretty big deal when Microsoft added a Gmail-like conversation view





to Hotmail, so it's not surprising to see that feature has carried over to this more modern email service. Though conversation view is enabled by default, you can also switch to a more traditional view where each message appears separately in your inbox. (You can do this in Hotmail, too, of course. This layout is just prettier.)

## SEARCH IN EMAIL

The built-in search bar on the left side of the screen responds quickly, narrowing down results as you type more letters. If you click in the field, you'll also see an option for advanced search, which lets you filter by sender, recipient, subject, folder, date range, keywords and whether or not the message has an attachment.

## SKYPE INTEGRATION

To all of you who have been wondering just what Microsoft was going to do with Skype, here's your

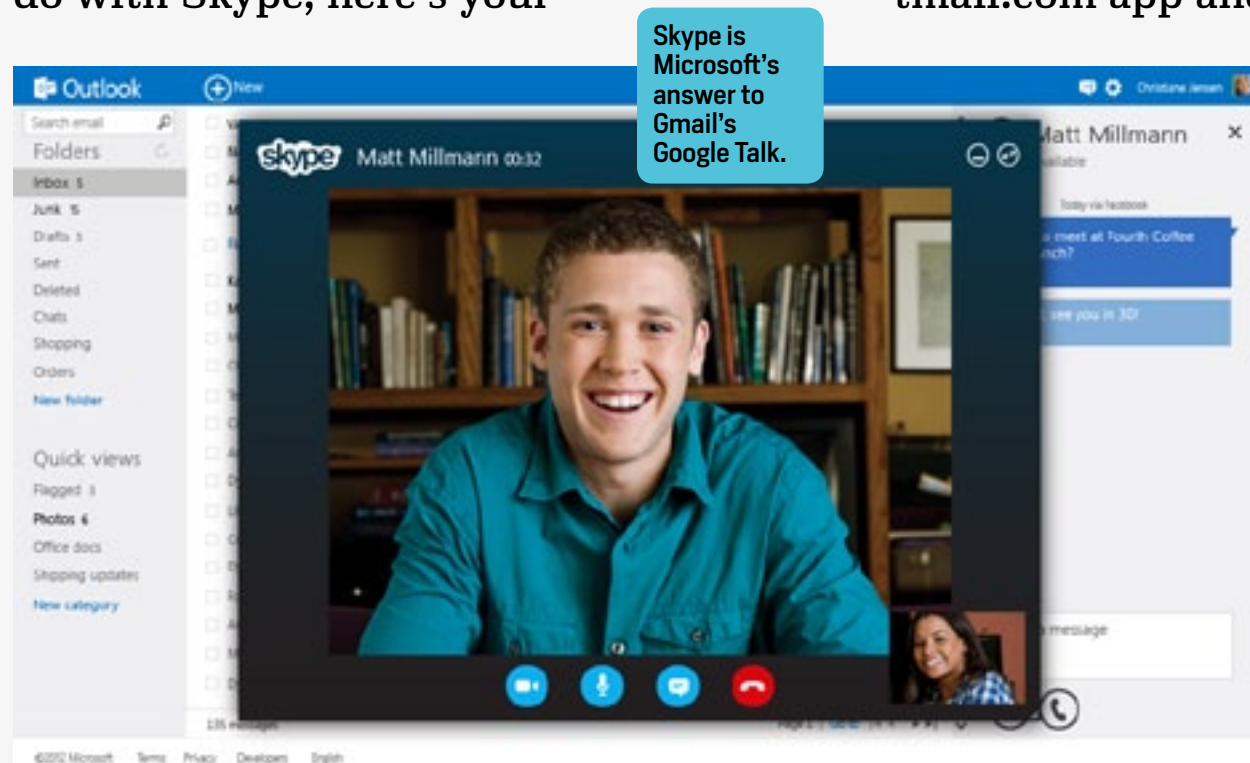
answer: Outlook.com will have Skype built in, not unlike the way Gmail has Google Talk integrated. Unfortunately, the service isn't ready just yet, but Microsoft says it will be rolling it out soon, so stay tuned.

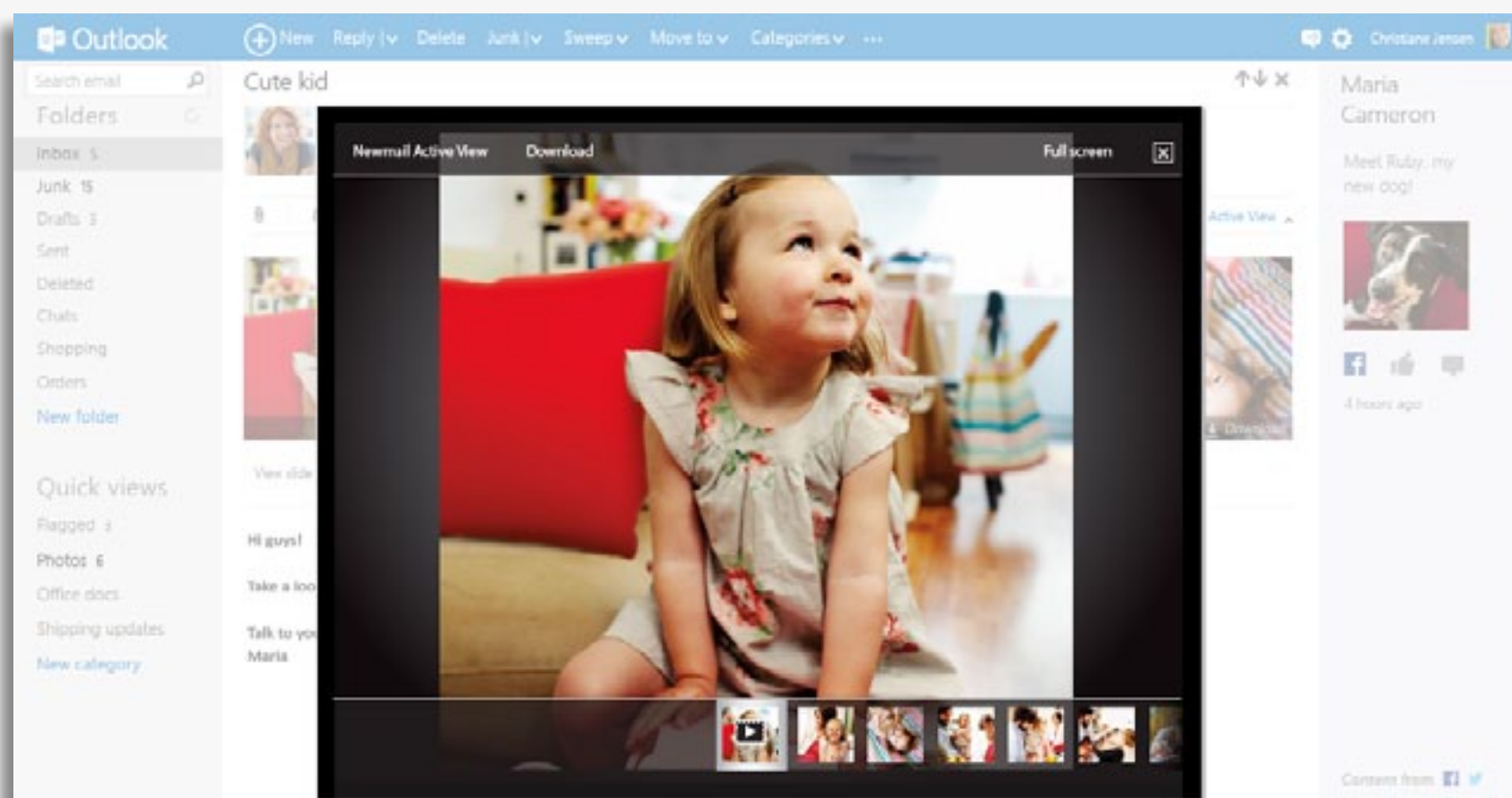
In the meantime, you can use Facebook Chat to talk to people, with the option of saving conversations in your inbox. We have to say, though, we did miss Google Talk after we made the switch: Facebook isn't as widely used a chat client, and Microsoft also doesn't have an IM client quite that ubiquitous. Still, Skype will naturally come in handy for video chatting, though.

## MOBILE ACCESS

At the moment, there aren't any standalone mobile applications, so if you want to access Outlook.com on the go you'll need to use either a browser or any app that already supports Exchange ActiveSync. In fact, if you open the Hotmail.com app and log in using your

Outlook.com credentials, you'll be able to use the app (minus, of course, the UI you'll get on Outlook's full site). For now, Microsoft won't say which mobile platforms it's considering, or when the first apps might arrive.





## SKYDRIVE AND CALENDAR: NO CHANGES (YET)

Not news, but worth mentioning: within the past few months, SkyDrive has been revamped with a more Metro-inspired user interface. Microsoft plans to announce more changes in the coming months, according to a company rep. It's worth reiterating, too, that the attachment size limit jumps to 300MB when you use SkyDrive. You also get 7GB of complimentary SkyDrive storage when you sign up for a new Microsoft account. As for the calendar, it's the same ol' Hotmail app — nothing new to report here. We're told Microsoft is considering making changes to the calendar in a future release.

## WRAP-UP

We have to hand it to Microsoft: Outlook.com is gorgeous, intuitive, feature-rich and

manages to feel even more calming than Gmail, which is no small feat, given how Google has taken pains in recent months to pare down the UI. We highly suggest giving it a try, even if you think Gmail is the greatest thing since sliced bread — yours truly, for one, might just convert full-time. Our only hope, though, is that Microsoft will make it even easier for those coveted Gmail users to make the switch; it's great that we can easily import our inbox, contacts and keyboard shortcuts, but it would be even better if our labels could come with us, and if mail sent from Gmail also synced with Outlook. Barring that detail, we've sincerely enjoyed our time testing Outlook, and something tells us we'll be poking around for some time yet. **D**

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*Dana Wollman is Reviews Editor at Engadget, a marathoner, lover of puns and a native Brooklynite.*





## SAMSUNG GALAXY NOTE FOR T-MOBILE



It's been nearly a year since the **Galaxy Note's** debut. Now, as it makes its way to T-Mobile, is a refreshed OS enough to get this phablet up to date?

By **Zachary Lutz**

**The Samsung Galaxy Note** is among a rare breed of smartphones that need no introduction. It's polarizing, memorable and single-handedly responsible for the popularization of the term "phablet." It's also the indisputable king of that category, having recently defended its throne against LG's Optimus Vu. Aside from the Note's sprawling display, much of its appeal lies in the tight software integration with the S Pen stylus, which endows the phone with notepad-like functionality.

The first (and second) time we reviewed the Galaxy Note, it featured Android 2.3. Since then,





it's received an update to Android 4.0, along with a new set of productivity apps dubbed the Premium Suite. Now as the phone arrives at T-Mobile (for \$250 with a contract and after a \$50 rebate), we're taking the opportunity to review not just the new variant, but in this case, the latest OS as well. You already know much of the Galaxy Note's story, but now the question remains: just how much of the text has been re-written?

## HARDWARE

We first met the Galaxy Note at IFA nearly a year ago, so its arrival at T-Mobile is quite tardy indeed. Like the AT&T version, it's based on a dual-core 1.5GHz Snapdragon S3 that's part of Qualcomm's previous generation of chips. We'll discuss performance in greater detail a bit later, but suffice to say this modest hardware, transplanted to support T-Mobile's bands, leaves us with a phone that no longer feels cutting-edge.

If you were to run down the spec sheet and compare the Galaxy Note on T-Mobile to its AT&T sibling, you'll be hard-pressed to spot any meaningful differences. Both phones offer 1GB of RAM, 16GB of internal

storage and an empty microSD card slot. As ever, the Note has a beefy 2,500mAh battery, and we're happy to report that its NFC hardware remains intact, too. As we've alluded to, the only worthwhile difference in this particular Galaxy Note is the new-found support for T-Mo's AWS infrastructure. This time around, you'll find 42Mbps HSPA+ connectivity across the 2100MHz, 1900MHz, 1700MHz and 850MHz bands.

Cosmetic stylings reveal a similar story: for better and worse, this is the same US variant of the Galaxy Note that you've already gotten to know. Button placement remains the same, along with the location of the camera pod, sensors and S Pen. While it's hard to ding Samsung for demanding consistency across its US lineup, we genuinely prefer the physical home button of the global Galaxy Note, which was es-

Down to the S Pen, this Note looks a lot like the AT&T variant.



chewed in favor of an all-capacitive scheme for the US variants.

Unfortunately, the location of the speakerphone grille also remains the same — as ever, its placement directly adjacent to the S Pen makes it difficult to feel around for the stylus. Also, a charging / notification light would've been a welcome addition. All in all, though, these are minor quibbles, but Samsung could've used this refresh as an opportunity to make these improvements, and it's a shame that didn't happen. As for the one cosmetic difference you *will* notice, T-Mobile's logo sits up top, in place of AT&T's branding (naturally).

It goes without saying that the Galaxy Note's massive 5.3-inch display is by far its most polarizing feature — you'll either love the added real estate or resent the extra girth. This is the same 1,280 x 800 Super AMOLED screen used on all the models, which is to say it's of the PenTile variety. All told, the sub-pixel layout means little in practice, as text appears sharp and colors are incredibly vibrant. It's worth pointing out, however, that display technology has advanced since the introduction of the Galaxy Note, and the difference is plainly obvious when you compare the phone to newer contenders like the Galaxy S III and One X.

While we'd previously marveled at

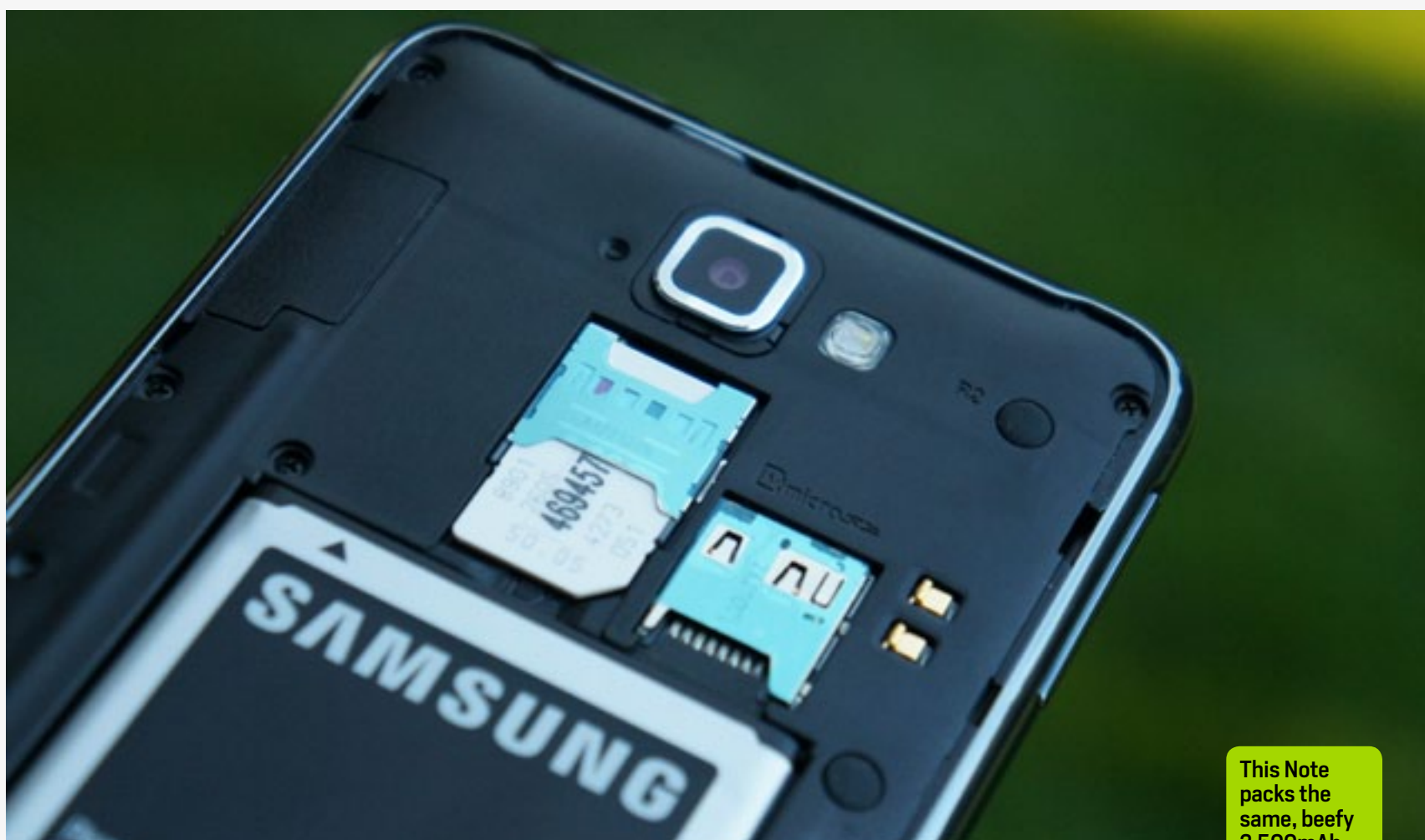
This Note's display feels dated next to newer screens.



PHONE	GALAXY NOTE (T-MOBILE)	GALAXY NOTE (AT&T)	GALAXY S III (T-MOBILE)
PRICING	\$250 (AFTER \$50 MAIL-IN REBATE)	\$250	\$280 (16GB), \$330 (32GB)
DIMENSIONS	5.78 X 3.26 X 0.37 INCHES (146.85 X 82.95 X 9.65MM)	5.78 X 3.26 X 0.37 INCHES (146.85 X 82.95 X 9.65MM)	5.38 X 2.78 X 0.34 INCHES (136.6 X 70.6 X 8.6 MM)
WEIGHT	6.34 OZ. (180G)	6.34 OZ. (180G)	4.69 OZ (133G)
SCREEN SIZE	5.3 INCHES	5.3 INCHES	4.8 INCHES
SCREEN RESOLUTION	1,280 X 800 PIXELS (284PPI)	1,280 X 800 PIXELS (284PPI)	1,280 X 720 PIXELS (306PPI)
SCREEN TYPE	SUPER AMOLED HD	SUPER AMOLED HD	SUPER AMOLED HD
BATTERY	2,500MAH	2,500MAH	2,100MAH
INTERNAL STORAGE	16GB	16GB	16GB / 32GB
EXTERNAL STORAGE	NONE INCLUDED, MICROSD	NONE INCLUDED, MICROSD	NONE INCLUDED, MICROSDXC-COMPATIBLE (UP TO 64GB)
REAR CAMERA	8MP, AF, LED FLASH	8MP, AF, LED FLASH	8MP, AF, LED FLASH, F/2.6
FRONT-FACING CAM	2MP	2MP	2MP
VIDEO CAPTURE	1080P	1080P	1080P HD
NFC	YES	YES	YES
RADIOS	GSM / EDGE (850 / 900 / 1800 / 1900MHz); UMTS / HSPA (850 / 1700 / 1900 / 2100MHz)	GSM / EDGE (850 / 900 / 1800 / 1900MHz); UMTS / HSPA (850 / 1900 / 2100MHz); LTE (BANDS 4 AND 17)	GSM / EDGE (850 / 900 / 1800 / 1900MHz); UMTS / HSPA (850 / 1700 / 1900 / 2100MHz)
NETWORK SPEEDS	DC HSPA+ 42MBPS	LTE; HSPA+ 21MBPS	DC HSPA+ 42MBPS
BLUETOOTH	V3.0	V3.0	V4.0
SOC	QUALCOMM SNAPDRAGON S3 MSM8660	QUALCOMM SNAPDRAGON S3 MSM8660	QUALCOMM SNAPDRAGON S4 MSM8960
CPU	1.5GHZ DUAL-CORE	1.5GHZ DUAL-CORE	1.5GHZ DUAL-CORE
GPU	ADRENO 220	ADRENO 220	ADRENO 225
RAM	1GB	1GB	2GB
MHL	YES (SPECIAL ADAPTER NEEDED)	YES (SPECIAL ADAPTER NEEDED)	YES (SPECIAL ADAPTER NEEDED)
WIFI	802.11 A/B/G/N	802.11 A/B/G/N	802.11 A/B/G/N
OPERATING SYSTEM	ANDROID 4.0.4, TOUCHWIZ UI	ANDROID 4.0.4, TOUCHWIZ UI	ANDROID 4.0.4, TOUCHWIZ UI







This Note packs the same, beefy 2,500mAh battery.

the bright whites of the Note's display, it appears somewhat murky with predominant yellow and blue tones when compared to newer, more advanced handsets. Don't let this serve as too much of a deterrent, though: unless you hold the two phones side-by-side, the Galaxy Note's display is still utterly drool-worthy.

With respect to the Galaxy Note's hardware, we're left with one final elephant in the room: its physical size. If you're familiar with the AT&T variant, you already know what to expect, as T-Mobile's is exactly the same, down to the sub-millimeter. As we've said, it's not for everyone: those with large hands will likely be overjoyed by the jumbo-sized proportions and the expansive virtual keyboard. Those with smaller hands, meanwhile, may struggle

at first to maintain a proper grip. That said, while the handset may strike some shoppers as slightly unwieldy, anybody intrigued enough should be able to adapt quickly.

## PERFORMANCE AND BATTERY LIFE

Much of the goodwill surrounding the Galaxy Note is due to the fantastic performance of the original, global model, which packs Samsung's home-grown Exynos processor. Still, the story changed a bit when we reviewed AT&T's variant, which is based on the Qualcomm Snapdragon S3. While the phone's performance remained respectable, it simply couldn't match that of the original. This is true for T-Mobile's version as well, which features the very



BENCHMARK	GALAXY NOTE (T-MOBILE)	GALAXY NOTE (AT&T)	GALAXY S III (T-MOBILE)
QUADRANT	3,347	3,598	5,032
VELLAMO	1,320	1,353	2,360
ANTUTU	6,354	6,530	6,868
SUNSPIDER 0.9.1 (MS)	2,661	2,769	1,764
GLBENCHMARK EGYPT OFFSCREEN (FPS)	33	34	54
CF-BENCH	6,520	6,523	8,759

SUNSPIDER: LOWER SCORES ARE BETTER.

same internals as the AT&T model.

In real-world usage, the Galaxy Note is a capable performer — albeit, not a very graceful one. While apps often open quickly, transitions and animations often stutter. Similarly, web pages often load and render without hesitation, but you're bound to notice slight hiccups during pinch-to-zoom. Curiously, the T-Mobile variant consistently delivered lower benchmark scores than its AT&T counterpart, though the difference was negligible. Compared to faster phones such as the Galaxy S III and One X, it's hard to classify the Galaxy Note as a powerhouse. It's a shame, then, that Samsung didn't update the T-Mobile variant with a Snapdragon S4, which could have secured the Note's place alongside other top-tier devices. Instead, you'll need to ask yourself whether the unique advantages of the Galaxy Note outweigh the performance hit.

Despite the massive 2,500mAh cell,

battery life is still just a bit better than average. In our standard rundown test, the phone managed to stay alive for a little more than eight hours, which is directly on par with AT&T's model. Similarly, during real-world tests with moderately aggressive usage, we could typically expect 28 hours of uptime before needing to scramble for an outlet. Overall, T-Mobile's Galaxy Note should be sufficient for people who already charge their phone each evening. If you forget, though, you'll be kicking yourself the next morning.

On the whole, call quality for T-Mobile's Galaxy Note is adequate, though if you have particularly discerning tastes, you'll likely prefer AT&T's variant. Every time we placed a call over T-Mobile, we noticed a small amount of distortion and echo in the background, and while we were always able to carry on a conversation without much trouble, it was a constant annoyance that we were never able to escape. It's worth mentioning, however, that we also perceived



a subtle but persistent hiss from the earpiece on the AT&T version, which we didn't notice here. Even so, though, we found the hiss on Ma Bell's model easier to ignore. Although we weren't able to test the feature, it's also worth pointing out that the Galaxy Note for T-Mobile supports WiFi Calling, which may eliminate these voice quality concerns. This is a free service that allows users to augment their coverage in spotty areas and place unlimited calls without affecting their monthly minute allotment — not too shabby, and you can only find it on T-Mobile's version.

## CAMERA

At this point, you're likely familiar with the 8-megapixel camera of the Galaxy Note, which is the same fantastic setup featured in the Galaxy S II. Needless to say, it's hard to take a bad photo with this phone, and it's easy enough, even, to capture truly gorgeous shots. Not only is the camera a solid performer in auto mode, but those who wish to fine-tune their photos will be delighted to find advanced features that include light metering, EV and ISO controls. Better yet, the interface of the camera app is completely customizable, which allows you to pin your most frequently used settings to the main screen, mitigating the need to dig through menus.

Not only does the camera capture an incredible amount of detail with accurate color reproduction, but its sensor is capable of taking in an appreciable

amount of light — so much so that you'll often be able to forego the flash in low-light settings. The camera's performance at nighttime is similarly impressive, which is further enhanced by the optional night scenery mode that captures HDR photos. Naturally, there are a number of other goodies to discover, such as the ability to take panoramas and macro scenes. Touch-to-focus is also in the mix, as is face detection, blink detection and an auto timer.

The Galaxy Note is capable of capturing video at 1080p, though by default it's set to record at 720p. While both modes deliver excellent imagery, we generally found the 720p setting to be the preferable of the two, which we perceived as being more lifelike and natural. Make no mistake, the Galaxy Note is no slouch with respect to its performance in 1080p, but unless you have a specific need to record at the higher-res setting, you're best off sticking with the default. Regardless of your shooting mode, you'll be glad to know that the internal microphone captures a great deal of sound with good clarity.

## SOFTWARE

Before diving into the new features contained within Android 4.0 for the Galaxy Note, let's get one thing out of the way: while the new software brings a number of useful additions, the overall changes to the user experience are rather subtle. In other words, if you'd managed to get caught up in the hype





of an entirely new lease on life with Ice Cream Sandwich, you'll be in for a bit of a letdown. Much of this is due to the fact that Samsung's TouchWiz dominates the user interface, which underwent only minor revisions with the transition to Android 4.0. That said, the phone embraces a number of Ice Cream Sandwich's marquee features, including Face Unlock and Android Beam. There's also a new utility for monitoring your data usage.

While we've historically railed against custom Android skins, we're hard-pressed to pooh-pooh the Galaxy Note. Not only is the interface handsome and functional, it's tailored for this large-screen device in ways that stock Android just isn't. This includes not only the spacious icon layout, but also the custom widgets and non-standard apps, (calendar, etc.), which make the overall experience feel cohesive — and dare we say it — special.

It's no secret that the S Pen is the cornerstone of the Galaxy Note, and much of Samsung's work to improve the software experience can be directly tied to the S Pen itself. If you've been following along, you've likely heard of Premium Suite by now, which consists of S Memo, S Note and an add-on app known as My Story. While S Memo remains largely similar to the previous version on Gingerbread, Samsung introduced a clever new widget that allows users to quickly jot or type notes, as well as take voice dictations. Although My Story is a nice concept that allows users to easily send fanci-

ful greetings to others, it's limited in its usefulness, as it only allows you to interact with My Story users. Perhaps it's for this reason that the app isn't included by default on the Galaxy Note and must instead be downloaded via Google Play.

Naturally, this leaves us with S Note, which can best be described as S Memo on steroids. While you might be scratching your head, wondering why Samsung didn't make these two apps one and the same, S Note is significantly more complex, and thus, takes much longer to load. All new notes are based on templates such as greetings, diary entries, recipes and travel logs — and man, are they graphically intensive. That said, you'll be hard-pressed to find such extensive content creation apps available on other smartphones, and the ability to combine text, imagery, drawings and written annotations is one of the most compelling features of the Galaxy Note.

Not only can S Note be used for play, it also brings serious productivity features such as an equation analyzer, shape recognition and integration with the Wolfram Alpha logistics engine. Oddly enough, this component can't accept entries from the keyboard, and instead, you'll be forced to write all queries by hand. Those who prefer jotting down notes as opposed to typing them, however, will greatly prefer S Note over S Memo, as the more powerful app brings the ability to convert handwritten words to text on-the-fly. This easily trumps the method in S Memo that requires you to manually invoke handwriting recognition.



By default, the T-Mobile Galaxy Note uses Swype as its keyboard, which is a bit perplexing, seeing as how Samsung's own keyboard is vastly superior — save for the ability to trace words. Not only does the Samsung keyboard take advantage of the extra real estate by providing a dedicated fifth row for numbers, it's also context-aware in that it presents a dedicated “www. / .com” key in the web browser. Users will also find the ability to write their text entries with the stylus, which is just one more way that Samsung's software has been thoughtfully integrated with the Galaxy Note. Finally, new in the latest software release is the option to condense the keyboard on either the right or left-hand side of the screen for one-handed text input — a feature that's been extended to the phone dialer as well.

At the end of the day, while Samsung's revisions in this latest software release are by no means revolutionary, they provide enough refinement to keep the Galaxy Note

among the most intriguing and compelling smartphones available today.

## WRAP-UP

We're more than a little disappointed that Samsung didn't take the opportunity to update the Galaxy Note with modern internals ahead of its debut on T-Mobile. What was once a premiere superphone is now beginning to show its age. As such, T-Mobile customers who insist on top-notch performance are left with no alternative other than the Galaxy S III (and to a lesser extent, the One S). That said, for those of you who appreciate the Galaxy Note's innate advantages — namely, its productivity features and beautiful, spacious display — Samsung's super-sized smartphone remains peerless. **D**

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*Zachary is too much of a Stones fan to be a good hippie. He's just trying to learn and do good where he can.*

## BOTTOMLINE

### SAMSUNG GALAXY NOTE (T-MOBILE)

**\$250**  
(ON CONTRACT)



## PROS

- Beautiful display
- Excellent camera
- Top-notch S Pen productivity apps
- Cohesive user interface

## CONS

- Performance is no longer cutting-edge
- Lacks notification light

## BOTTOMLINE

While the Galaxy Note's specs no longer feel bleeding-edge, we've yet to see a pen-enabled phone as pleasant to use as this.



# OS X 10.8

With each iteration,  
Apple's desktop OS creeps  
ever closer to mirroring its  
mobile counterpart.  
Is Mountain Lion a sign  
of the post-PC times?  
By Brian Heater

# Mountain Lion

**A LOT HAS CHANGED** since early 2001. We've got a new president approaching the end of his first term, the US has embarked on two major wars and the words "Lady Gaga" have become much more than just gibberish. Some things, however, don't change. In nearly each of these intervening years, Apple has issued a major update to its desktop operating system, OS X. This time last year, the company issued OS 10.7 Lion,





a king-of-the-jungle moniker many thought would mark the end of Apple's big cat naming scheme and, by extension, the OS X lineage. In February, however, the old operating system showed she still had some life left in her, when the next edition was revealed, arriving over the summer and called Mountain Lion.

Based on the name alone, you'd think 10.8 would be a modest improvement over its predecessor — not unlike the baby step between Leopard (10.5) and Snow Leopard (10.6). But Apple in-

sists that this latest build is more than just a seasonal refresh — in all, it boasts more than 200 new features. Some are major, including things like a new Notification Center, AirPlay Mirroring and a desktop version of Messages. Others, such as full-screen mode for Notes... not so much. What seems to unite the vast majority of the 200 features, however, is a nod to iOS. So, how easily can Mac users justify that \$20 download? Follow along as we put those 200 features to the test.

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# Upgrading



**UPGRADING TO MOUNTAIN**  
Lion couldn't be easier — assuming you have the kind of internet connection that can reasonably handle a 4.34GB download. If you don't, well, you may want to look into

spending a morning at your nearest Starbucks. Apple won't be releasing the software on a USB stick like it did last time, so downloading from the Mac App Store is your only option. If you previously made the jump to Lion courtesy of a downloaded update, you should be quite familiar with what goes on here. It's a simple sequence of waiting for the download, sitting through a few reboots and then, presto, you have a new OS. We ran the upgrade on a late-2010 MacBook Air with a Core 2 Duo processor and the install process took just over 30 minutes. Faster machines will likely chew through the installation code more quickly.





**OS X REACHED** its 10th anniversary last year. When it was first introduced in 2001, the operating system was something of a revolution, surpassing its predecessor and, arguably, what was then the most current version of Windows. In the past 10 years, Apple's desktop OS has seen its share of changes, with a major point upgrade coming nearly every year. With the release of Lion 12 months ago, many suspected the company had

issued the final installment in the OS X story, but Apple had at least one more up its sleeve. With that in mind, it's no surprise that Mountain Lion bears

more than a passing resemblance to its similarly named predecessor. In fact, out of the box, the only striking difference between 10.7 and 10.8's respective

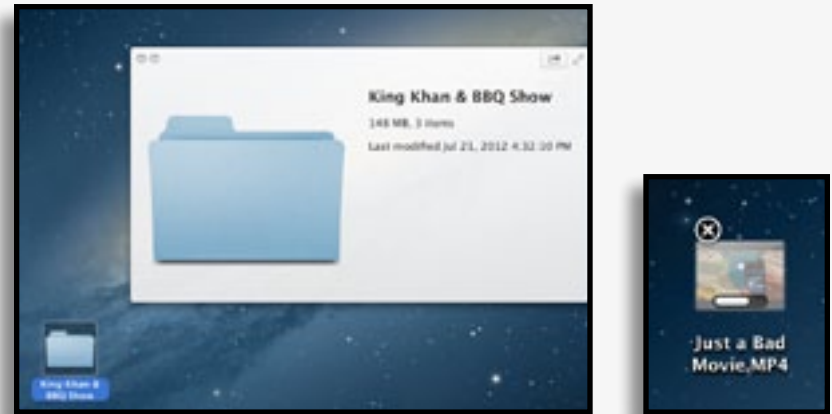




desktops is a new default wallpaper. (Clearly, Apple wasn't through with its celestial theme.) As with Lion, hard disks and other drives won't show up on the desktop by default, but you can easily adjust that in Preferences.

Though Apple crammed more than 200 features into its latest OS, these upgrades don't include any significant changes to the overall look and feel — certainly, it's nothing like the transition from Win7 to Windows 8, which will also be released within the coming months. That said, the Finder has gotten a bit of a facelift. First up is the introduction of an inline progress indicator for file transfers from a drive or server — one of many features borrowed from iOS. In addition to the traditional progress window that pops up in the middle of the screen, a small white bar is overlaid on top of a grayed-out file icon, letting you know how much of the transfer is left. A big “X” also pops up on top in the upper-left corner, if you get cold feet about moving files back and forth.

Addressing a complaint in 10.7, Apple has made the sidebars in Finder windows a bit more customizable, so that drag-and-drop functionality now includes categories. In other words, you can pick up and reorder things like Favorites, Shared and Devices to suit your quick-selecting needs. Another handy addition is the ability to encrypt files from the comfort of the Finder sidebar — just highlight a drive and either click Control or give a two-fingered tap to the right side of the trackpad to protect it from prying eyes. Enter a password twice followed by a hint



Clockwise from top: The new three-finger tap preview window, inline progress indicator, and file encryption directly from the Finder sidebar.



and your machine will start encrypting.

If you thought Apple had already used up every possible swipe and tap combination, boy have we got the one-handed gesture for you — tap three fingers on a file or folder, and you'll get a preview window, offering up an icon, the name of the file, its version and size and an option for opening it. In the case of multimedia files such as movies, you can hit play without launching a separate program. Once that window is open, you can preview other apps by highlighting them with the cursor, which should prove a boon for people who prefer large icons. Like the Finder windows, the Preview also features the new share button, a near-ubiquitous addition to Mountain Lion that allows you to transfer files through a variety of methods, tailored to different apps. These include email, Message and AirDrop.



# AirPlay Mirroring

**HERE AT ENGADGET HQ**, there's no single Mountain Lion feature we're more excited about than AirPlay mirroring. It worked on the iPad, so why not bring it over to OS X? Using an Apple TV, you can beam movies and other content from your computer to an HDTV at up to 1080p. The setup

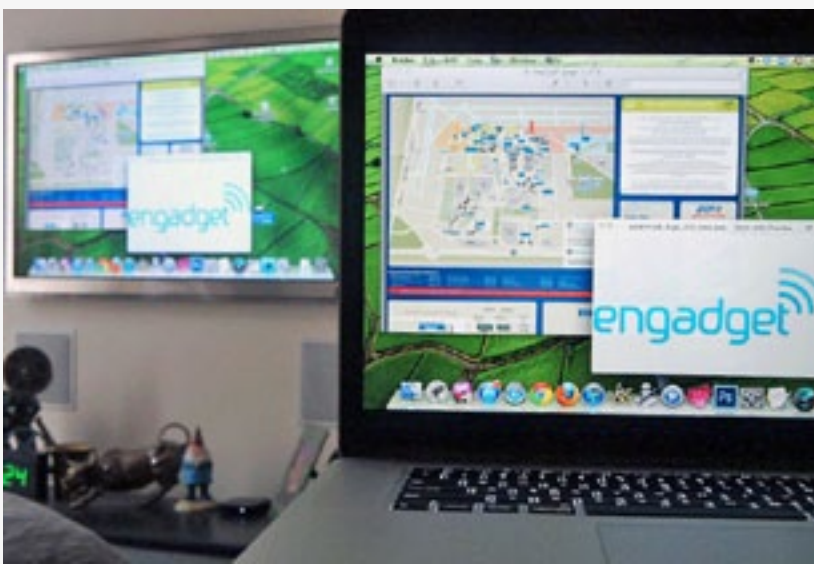
couldn't be more straightforward — get your system and Apple TV on the same wireless network and the AirPlay logo will pop up in the right-hand corner of your desktop. Select Apple TV from the drop-down menu and it will start to glow blue. You can then choose to have the system either scale to match the resolution of your desktop or just fit it to the TV.

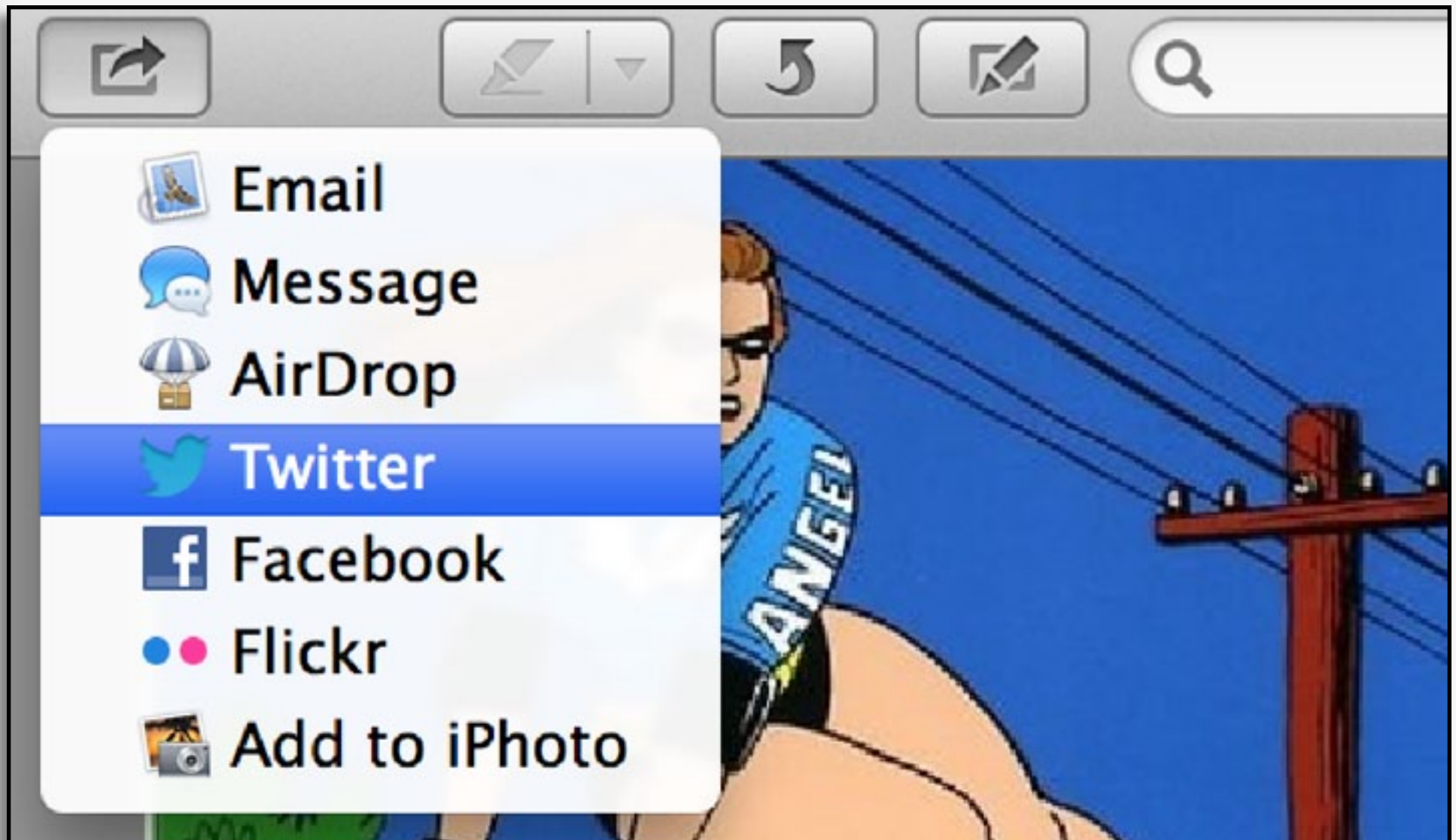
Mirroring works with iTunes, of course, switching to full-screen automatically. We used it to watch some movies on Hulu, mirroring both the video and the full system output (if you do that,

you'll want to silence everything else that's going on). We noticed less than a second of lag — not a problem for videos, but it could be an issue if you plan on using your TV to play Game Center titles. Otherwise, it's a seamless experience with one major oversight: some serious hardware limitations. We attempted to do some mirroring using our two-year-old MacBook Air, but couldn't quite accomplish the task. In order to take advantage of the feature, you'll need one of the following devices:

- iMac (mid-2011 or newer)
- Mac mini (mid-2011 or newer)
- MacBook Air (mid-2011 or newer)
- MacBook Pro (early 2011 or newer)

Whatever you own, you'll also need a second-generation Apple TV or a newer model.





# Sharing Button

You can run, but you can't hide from the Share button. Apple's integrated this feature into just about every first-party app in Mountain Lion. Cupertino clearly knows how devoted you, the Mac user, are to the various social networks in your life, and it wants to save you a few extra steps

when it comes sharing content. Notably, these sharing options include a number of third-party services, including Twitter, Vimeo, Flickr and Facebook (in beta until later this year).

And while Apple's not going out of its way to highlight a certain Mountain View-based company — it programmed a Safari bookmark for Yahoo, of all things, but not Google — YouTube is included as







Apple's new "Share Sheet" interface borrows some real world visual cues, providing you with a preview of the share file clipped to the corner.

chosen program (or from Finder, with your chosen file highlighted), select your sharing method from the drop-down menu and send it off. Obviously, with Twitter, Facebook and email, you'll want to add some context, too.

You can do all of that from a "Share Sheet," Apple's sharing interface, which offers up an image of the file you intend to send, paper clipped to its side. The first time you attempt to send something using email, Twitter, etc. you'll be prompted to add an account, at which point the Mail pane will open in System Preferences. Once signed in, you're good to go across all of the apps that use this functionality. In the case of Twitter, Mail and Facebook, messages will be delivered directly to the Notification Center once you're logged in.

Sharing is just one of many features in Mountain Lion ported over from iOS — take a look, even, at that little arrow icon, first used in the mobile versions of Mail and Safari. In the context of the iPhone and iPad, this feature is a necessity. On the desktop, not so much — not with true multitasking and all that screen real estate anyway. Still, as unnecessary as it may seem, it's a nice addition to the OS. And, unlike other features introduced in this release, we can honestly see ourselves incorporating this into day-to-day workflow.

a sharing option in QuickTime. (Interestingly, this doesn't apply when a QuickTime file is highlighted in the Finder, for some reason.) Apple's done a good job tailoring sharing to different services — Finder, for example, just offers up email, Message and AirDrop, while Preview includes all those options, plus Twitter, Facebook, Flickr and iPhoto. It's hard not to note certain oversights with regards to the selection here — while Apple's mostly done a good job including heavy hitters, we'd love to see services like Google+ and Viddler included in future releases. Some apps, like DropBox, might be a tall order, given their overlap with Apple's own offerings, such as iCloud.

If sharing were anything less than idiot-proof, it would be hard to imagine it becoming an essential part of people's workflows. After all, pasting a link to Twitter or uploading a photo to Flickr are already straightforward options — as is AirDrop's close-proximity peer-to-peer sharing, which was introduced in Lion. That said, Apple made the whole ordeal as simple as possible. Click the Share button in your



# Notification Center



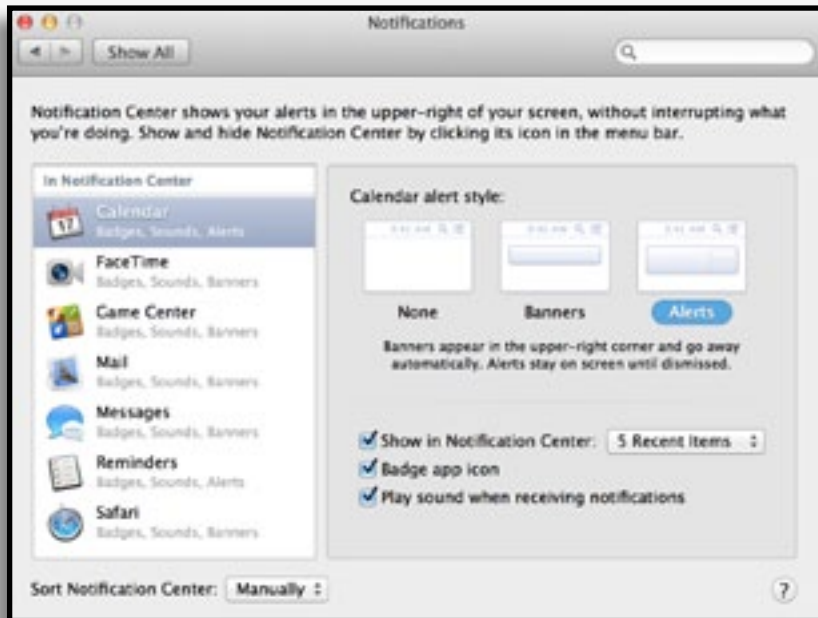
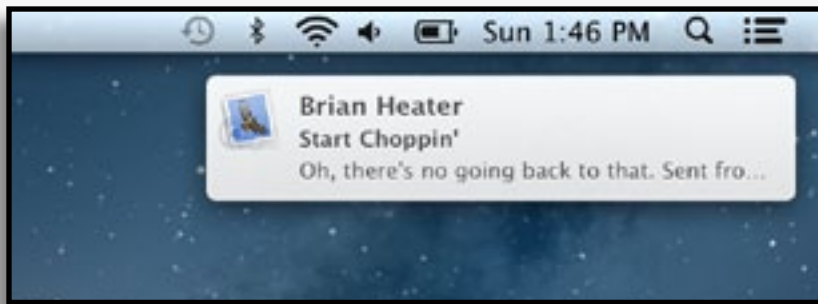
**THE MOST SIGNIFICANT** addition to Finder in Mountain Lion is actually hidden away — or rather, pushed to the side. Your first hint that the Notification Center is even there is a rather plain graphic added to the upper-right corner of your desktop's toolbar: three parallel lines,

the one in the center slightly shorter than those flanking it, with three square bullet points to their left. Clicking this will shift the whole desktop (save for the toolbar) to the left, revealing a hatched gray pane, the Notification Center. Just how far the whole thing shifts depends on the resolution of your monitor — using the new 15-inch MacBook Pro with Retina display at a medium resolution, the display moved

by about a fifth of the screen.

Notification Center can also be accessed with a two-fingered swipe, right-to-left, starting from off the trackpad. If you were worried that Apple was having trouble figuring out how to utilize screen real estate opposite the Dashboard, worry not. Shifting everything back is a simple matter of swiping the other way or clicking the icon or the desktop itself.





If you're wondering just how liberally Apple borrowed from iOS in Mountain Lion, take a little trip just off to the side of the desktop. Notification Center mimics iOS' drop-down notifications, right down to the color scheme. All important messages (and plenty of non-important ones) flow through here: email, Twitter, Facebook (coming soon), Messages, Calendar appointments, reminders and updates from OS X, the App Store, Safari, Facebook and Game Center. Click on a note and it will open up the full message / alert in its respective program.

Not keen on checking the Center every few minutes? Fear not: before populating the sidebar, the notes appear as a small banner in the upper right corner of your desktop (sorry, Growl), where they linger for a few seconds and then disappear, vanishing into the

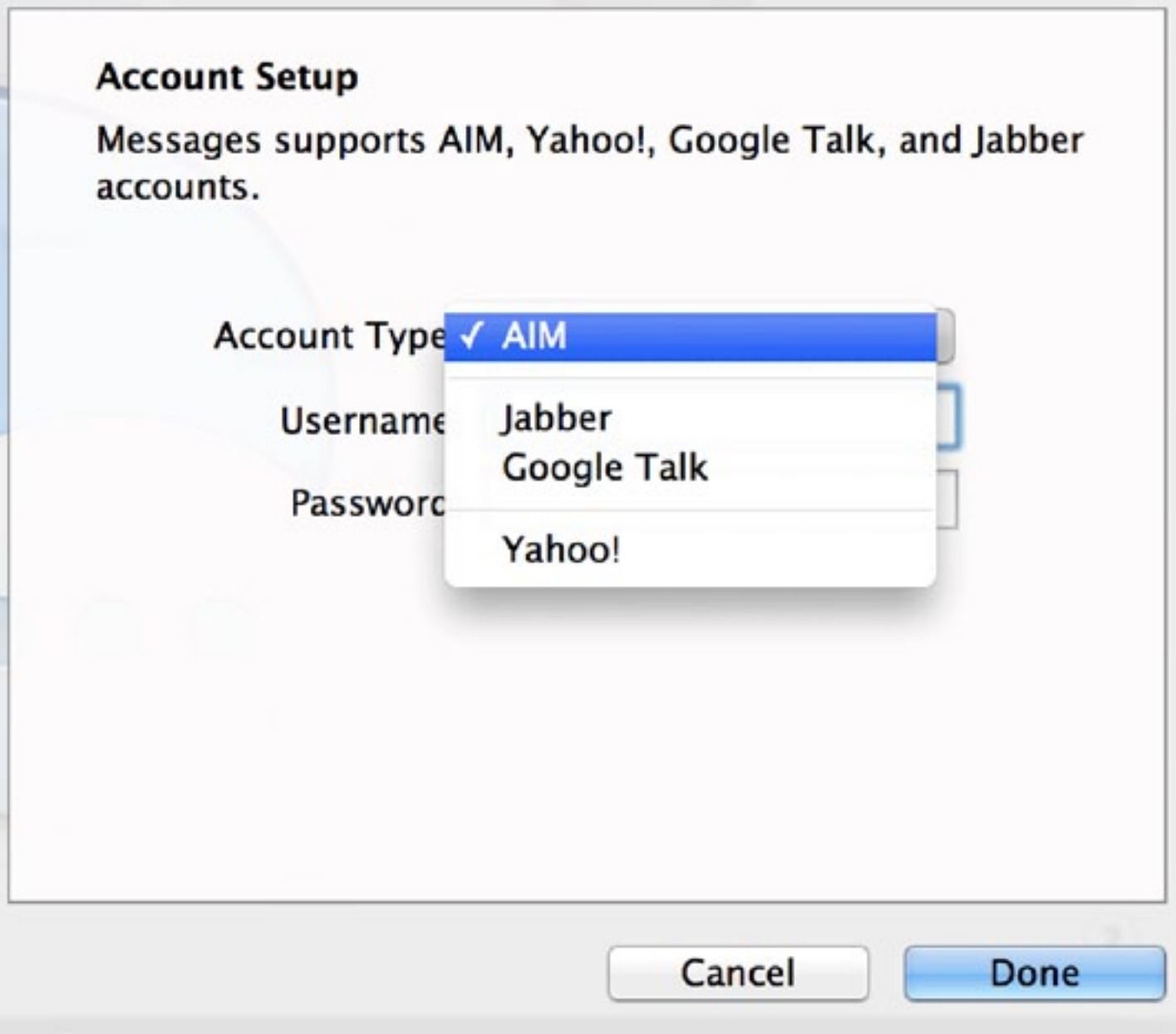
ether. You can speed up the process by swiping them offscreen using the trackpad. More important notes — system updates, reminders and calendar appointments, for example — show up as alerts, which need to be dismissed before they go away. No, you can't blame missed meetings on ol' Mountain Lion.

Of course, the whole banner / alert thing can be adjusted through the settings menu at the bottom of the Notification Center — you can also opt to receive no notes at all, as well as disable sounds. If you're not feeling the default arrangement, you can't actually switch things around in Notification Center, but you can fine-tune things all you want in the settings. Apple has also found yet another location for sharing in the form of Notification Center, adding "Click to Post" and "Click to Tweet" buttons for Facebook and Twitter. (Again, Facebook support is currently in beta, coming later this year.)

With the addition of banner alerts, Notifications go right to the forefront of the OS X experience — unless you go into settings and disable them (or just never sign into any accounts), it's awfully hard to avoid them. Not that we'd want to. Notifications are a truly handy addition that should fit quite comfortably into most people's workflows. They never felt particularly intrusive to us (especially since they disappear after a few seconds), but again, on days when you can't handle Twitter screaming for your attention, tuning out is as simple as rejiggering the settings.



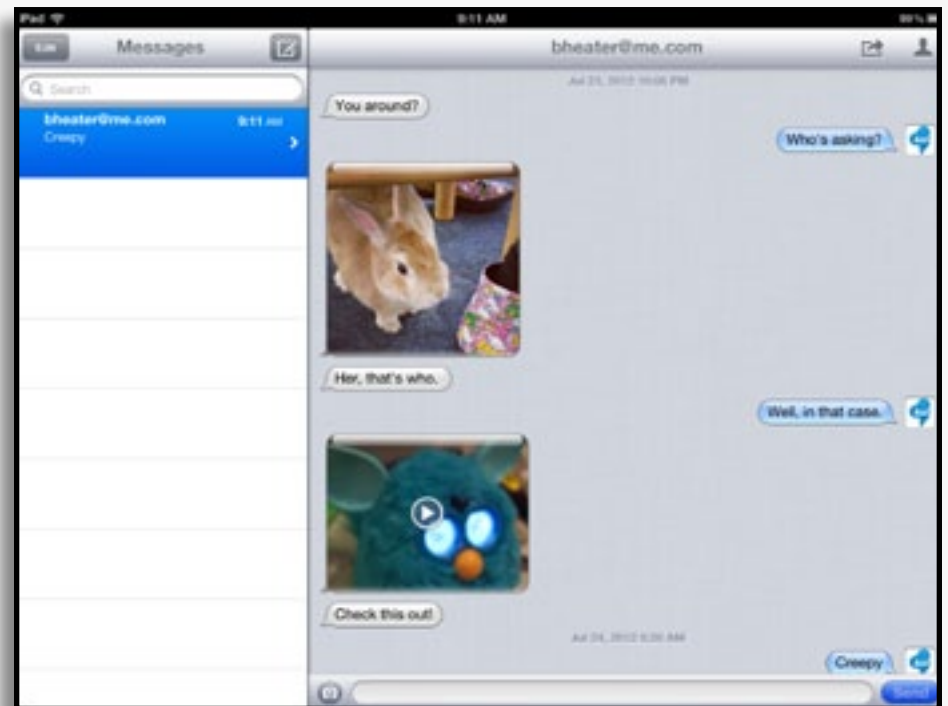
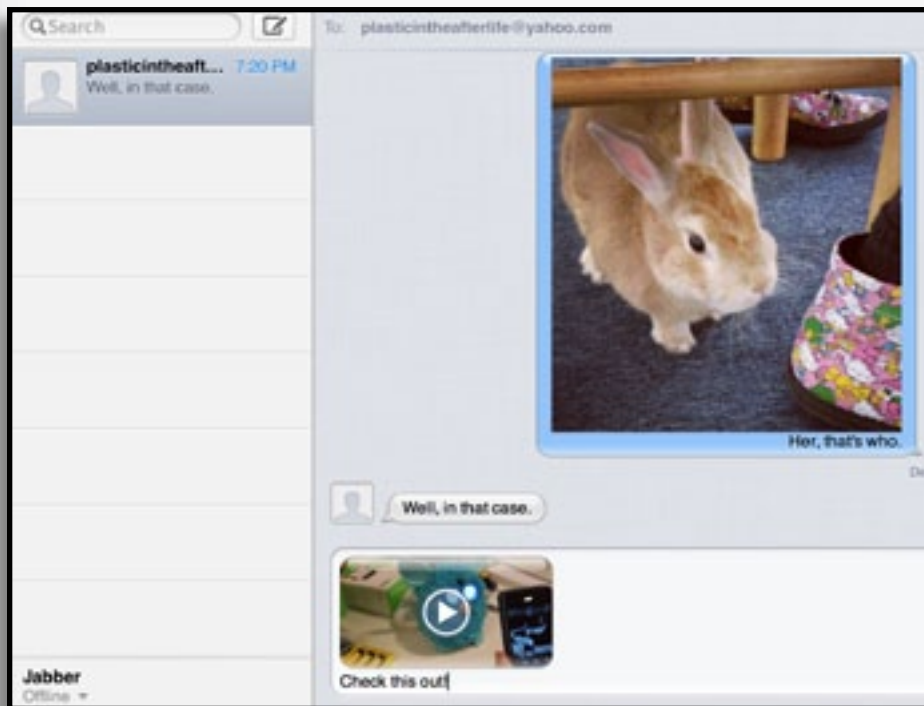




# Messages

**MOURN NOT THE LOSS** of iChat — Apple's long-running chat client had a good run, but things change, software evolves and mobile apps get absorbed en masse by desktop operating systems. It's the circle of life, really. iChat is being put out to pasture a month ahead of its 10th birthday, making room





for another friendly face: Messages. The iOS client has been fully grafted onto OS X, and compared with other mobile-inspired features in Mountain Lion, Messages is arguably the most comfortable fit. After all, Messages is simply unavoidable in iOS. Integration here means you're able to communicate directly with anyone who has an iOS device. Thankfully, however, it's not just a closed Apple system; services that had been supported by iChat — AIM, Google Talk, Jabber and Yahoo — are included here, too.

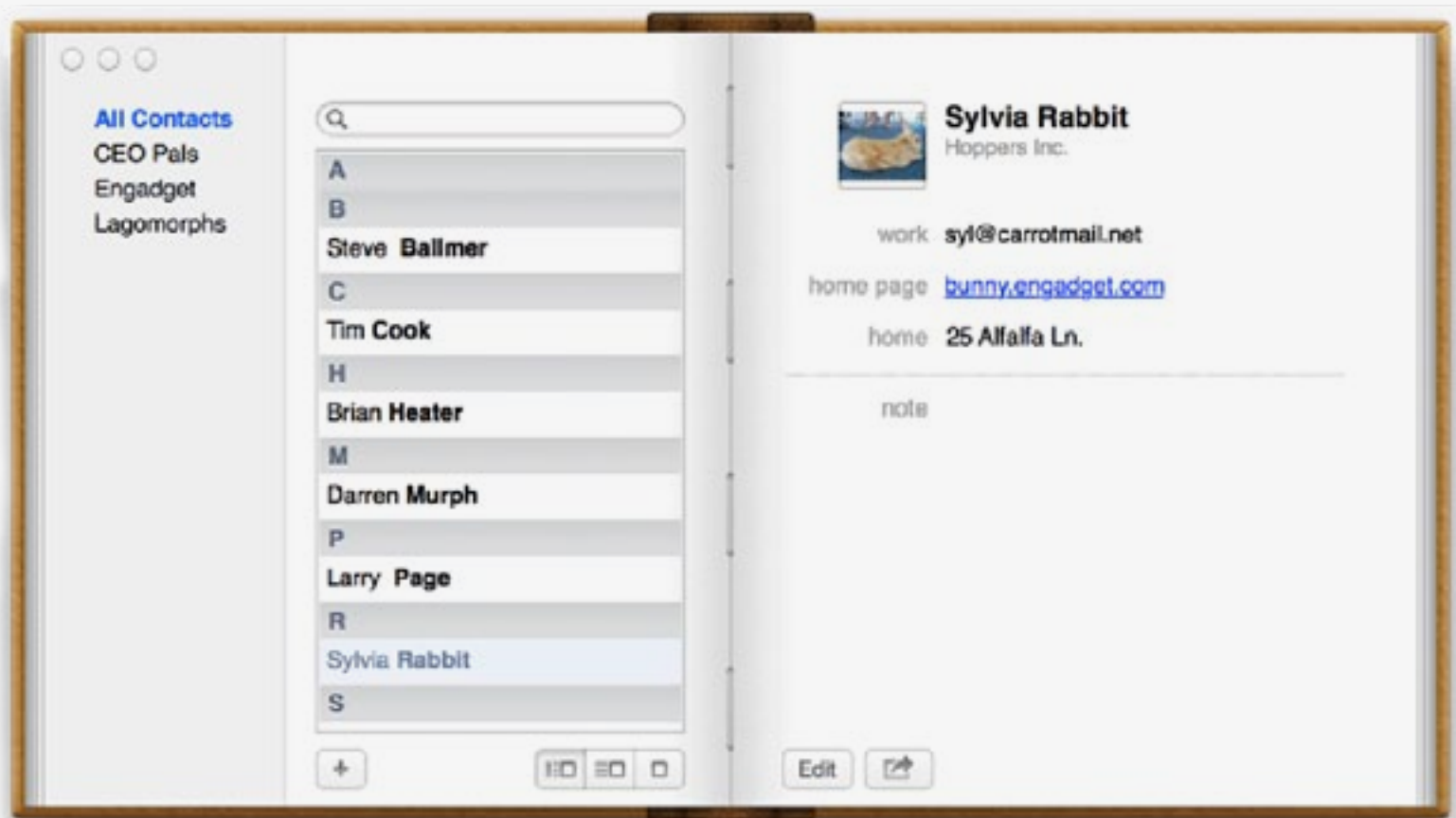
Save for the touchscreen keyboard, the app looks pretty much the same as it does on the iPad. The left side is where you'll find different conversations, with a search bar at the top. The main pane, meanwhile, shows dialogues with the usual word bubbles — by default, you're on the right side in light blue, and your friend is on the left in white, but you can tweak colors (as well as fonts) in the settings. As ever, you'll see an ellipsis when your friend is typing. Additionally, you can send messages to a phone number or

Apple transitions away from iChat completely, integrating Messages into the OS (above left) and essentially using the same format you've grown familiar with on the iPad (above right).

email address (with an autocomplete if it's in your address book and connected to an Apple ID).

If you happen to have Messages closed while someone's attempting to get your attention, a notification will pop up in the corner of your desktop. If you're online, a new conversation will pop up in the left column, with a blue circle showing it's unread. You can add attachments like photos and video (up to 100MB), both of which will show up inline. Video, however, will open up in a separate player when you click on it. Speaking of video, you can click the FaceTime button in the upper-right corner to cut straight to staring at your friend's beautiful mug. Group messages are also possible by typing multiple names into the "To" field. The desktop version of Messages supports full-screen mode, message forwarding and lets you set delivery and read receipts, so you know your messages are getting through.





# Mail and Contacts

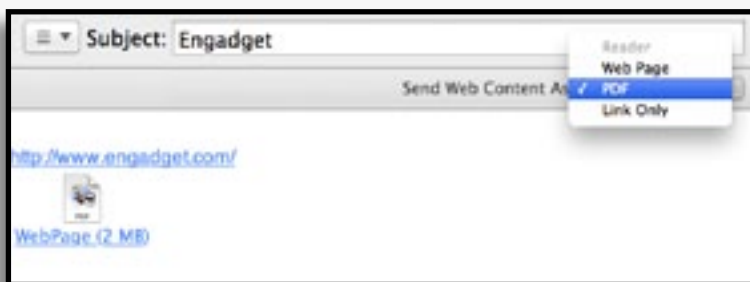
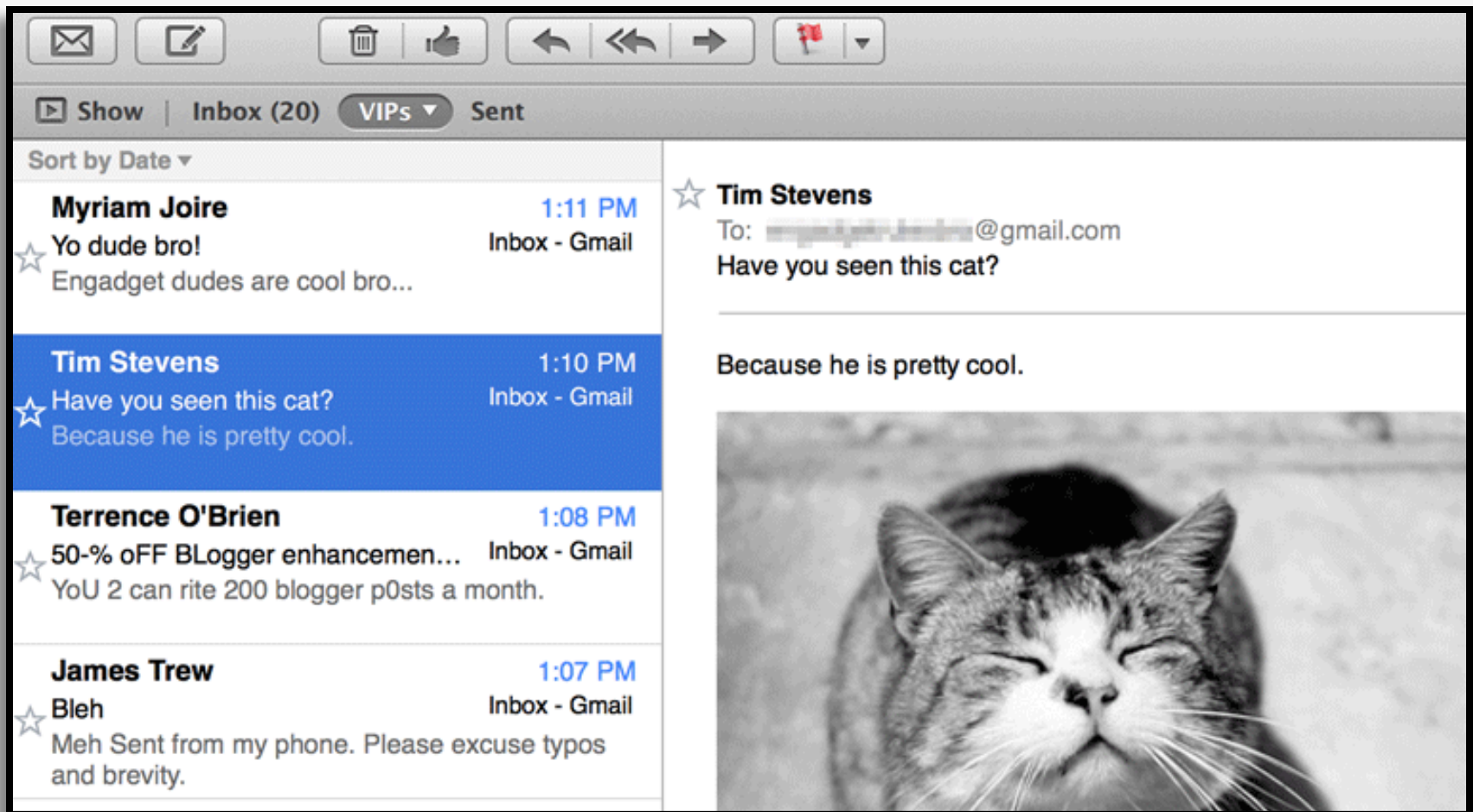
**NOT A TON OF CHANGES** on the Mail front, though Apple's made a few tweaks to its email client. Chief among these is the addition of VIPs — a priority inbox of sorts that lets you hand-pick the folks who should skip to the front of your ever-flooded inbox. Hover over the email address of a sender and you'll see

a little hollow star. Click this and, boom, that person gets the velvet rope treatment. You can view them and all their fellow Cristal-drinking emailers by click-

ing the VIPs tab in the mail toolbar. The rest of the riffraff will have to wait. It's worth mentioning, too, that Mail's got an itchy spam-filtering trigger finger. You'll







The new VIPs section in Mail now let's your tight crew skip the riff-raff and head straight to the front of the line, while Safari's Share button allows easy access email sharing in a variety of formats.

want to do some inbox training when you first get started.

Speaking of preferences, all of your favorites, recent senders, signatures, smart mailboxes and other account info gets pushed out to iCloud and, by extension, all of your connected devices. Search in the Mail app has been souped up a touch, too — start typing and it starts filtering, weeding out results that don't match. And skipping to the top of your inbox is as simple as clicking the sort bar at the top, in the blank space to the left of the actual "Sort By" drop down. Oh, and if you're looking to email a webpage, you can do so by clicking the Share button in

Safari and selecting Mail from the drop down. A blank message will pop up, letting you choose how you want to deliver that content — in Reader View or as a webpage, a PDF or link.

Address Book is now known as Contacts (\*cough\* iOS). Name change aside, things haven't really changed. A share button has been added, so you can send contact cards via email, Message and AirDrop. There are categories now, too — you can add those by selecting New Group from File, dragging and dropping selected contacts into the categories. Handily, the Contacts app combines info from multiple sources — email addresses, phone numbers, etc. — into single entries, so you don't end up with multiple cards for any given person.



# Calendar and Reminders

**SIMILAR TO CONTACTS**, iCal has been renamed Calendar to match its iOS counterpart. On the whole, though, the program looks nearly identical to its predecessor, down to the faux leather gracing the top pane, and the remnants of torn-out pages. There are a few minor tweaks here and there — for one thing, the menu for

toggling between multiple calendars (e.g., Work, Home, Gmail, etc.) has changed from a drop-down dialog box to a sidebar on the left.

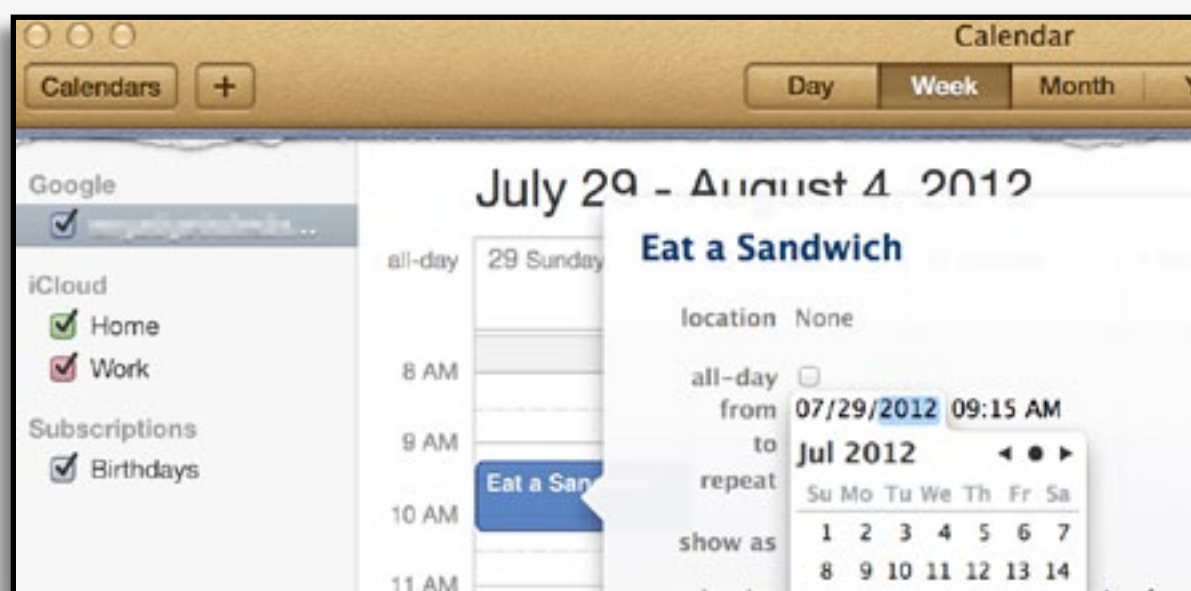
Calendar's search, meanwhile, offers up events on the right side, rather than the bottom, where it sat in Lion.

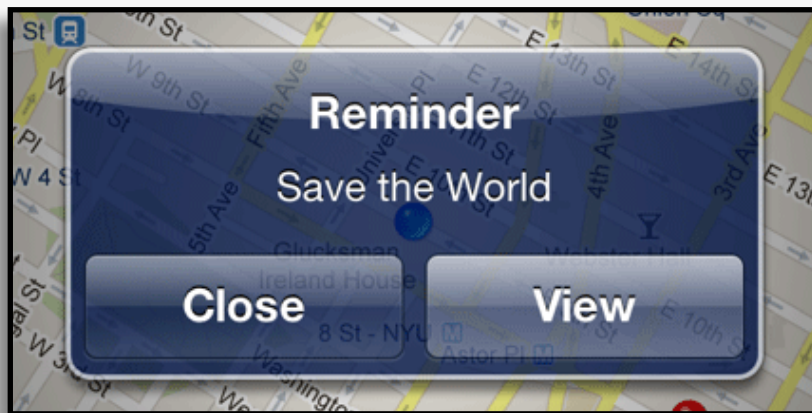
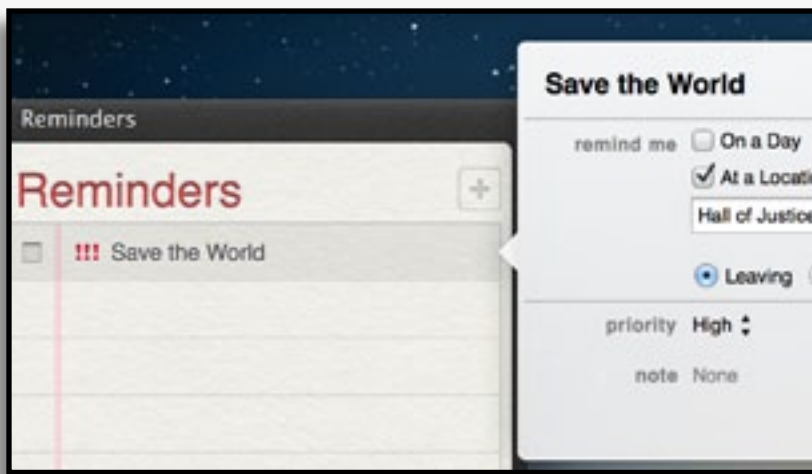
That search feature offers up suggestions and search “tokens,” which can be combined to create more specific searches. The date selector inside of an event now offers a small pop-up calendar, making it easier to choose a date by allowing you to go back and forth

between months.

And, of course, once events are added to the calendar, they'll feed into the Notification Center, sitting at the top of the screen until you see fit to dismiss them.

As in iOS, Reminders live outside of the





Calendar. The app, new to OS X, looks a lot like its iPad counterpart, except with a few aesthetic tweaks, including a more leathery theme and more detailed texturing in the app's binder paper. Rather than relying on the List / Date buttons on the left sidebar, the desktop version has a calendar in the bottom left (though you can make it disappear by hitting the calendar button at the bottom). Using the calendar, you can refine the reminders by day (though not by month or week), so you can see everything you need to do on, say, August 3rd. Reminders are organized by categories in the sidebar. You can toggle between them by highlighting your chosen category or doing a two-fingered swipe left and right on the reminders themselves. Clicking the triangle icon in the bottom left-hand column will collapse the app into one column, removing categories from the view.

Click Reminders in that left sidebar and select a line on the paper to start writing. You can program due dates so Reminders can nag you as the deadline looms. Next to each reminder is a check box — tick this when finished, and it'll get filed as complete. You can always untick it, if you need to add it back to your reminder list. As you'd expect, clicking the "I" that appears when you hover over the entry lets you go in and adjust its settings. You can add notes, change its priority, from None (no exclamation marks) to High (three exclamation marks) in a drop-down menu and add reminders by ticking one of two boxes. Reminders can be set for a given date and time location — be it arriving or leaving. To utilize the latter, you're going to have to enable location-based tracking in the Privacy pane of System Preferences. We set the reminder to pop up when we left Engadget HQ and took a quick stroll outside the building, and lo and behold, one New York City block later, our reminder popped up on the old iPhone 4. Pretty handy. The reminders get pushed to your devices via iCloud, appearing on the device you're using when the time comes to remind you. Really, that's what this app is all about — it's less a desktop application than a counterpart to a feature that many are already using on their mobile devices. Notifications are key here. We've had some difficulty incorporating these sorts of applications into our daily lives — particularly on the desktop. The ubiquity of the notifications, however, may be just what we needed to give it one more go.





# Safari

**NATURALLY, APPLE WOULD** love few things more than to wean you, the OS X user, off of your Chrome / Firefox dependency. As such, it's added a sprinkling of welcome features to help sweeten the pot. Chief among these is the new Smart Search field, which, to be honest, is more of an "it's about time" addition

than a truly innovative feature. In short, it incorporates predictive search into the address bar. If you've used Chrome, you know the drill: start typing and Safari will start listening, pulling up suggestions based on your search history. As with Chrome, results from your Bookmarks and history are listed

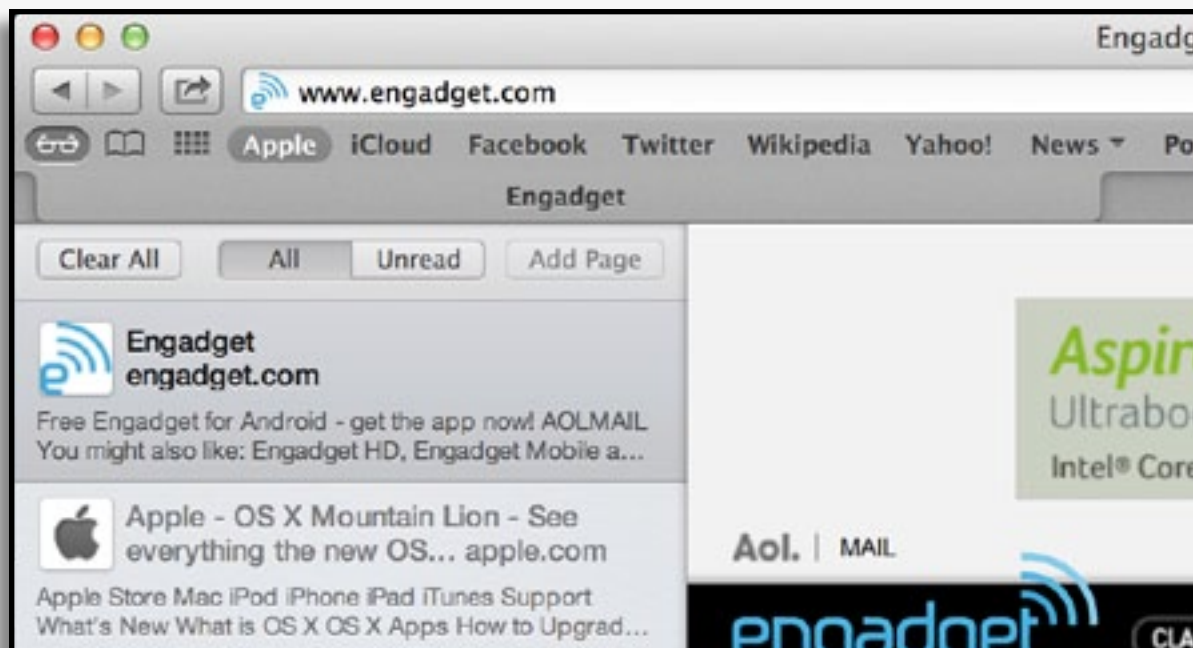
below the suggestions; Apple does a good job separating these results from one another, with a horizontal line.

The space just to the left of the toolbar has gotten a bit more crowded, too, with the addition of an iCloud logo (only once you've enabled that functionality in System Preferences) and, of

course, that ubiquitous new Share button, which is home to Add Bookmark and Add to the Reading List, on top of the standard email / message / Twitter functionality. The iCloud feature, mean-

The new Tab View in Safari offers users the ability to scroll quickly through pages using the trackpad.





The Reading List tool (that familiar toolbar icon with the spectacles) now offers offline browsing, once the page is allowed to cache.

respective page titles and URLs. From here, you can quickly scroll through the pages. It's a nice feature, to be sure, but it's not likely to become an essential part of the workflow

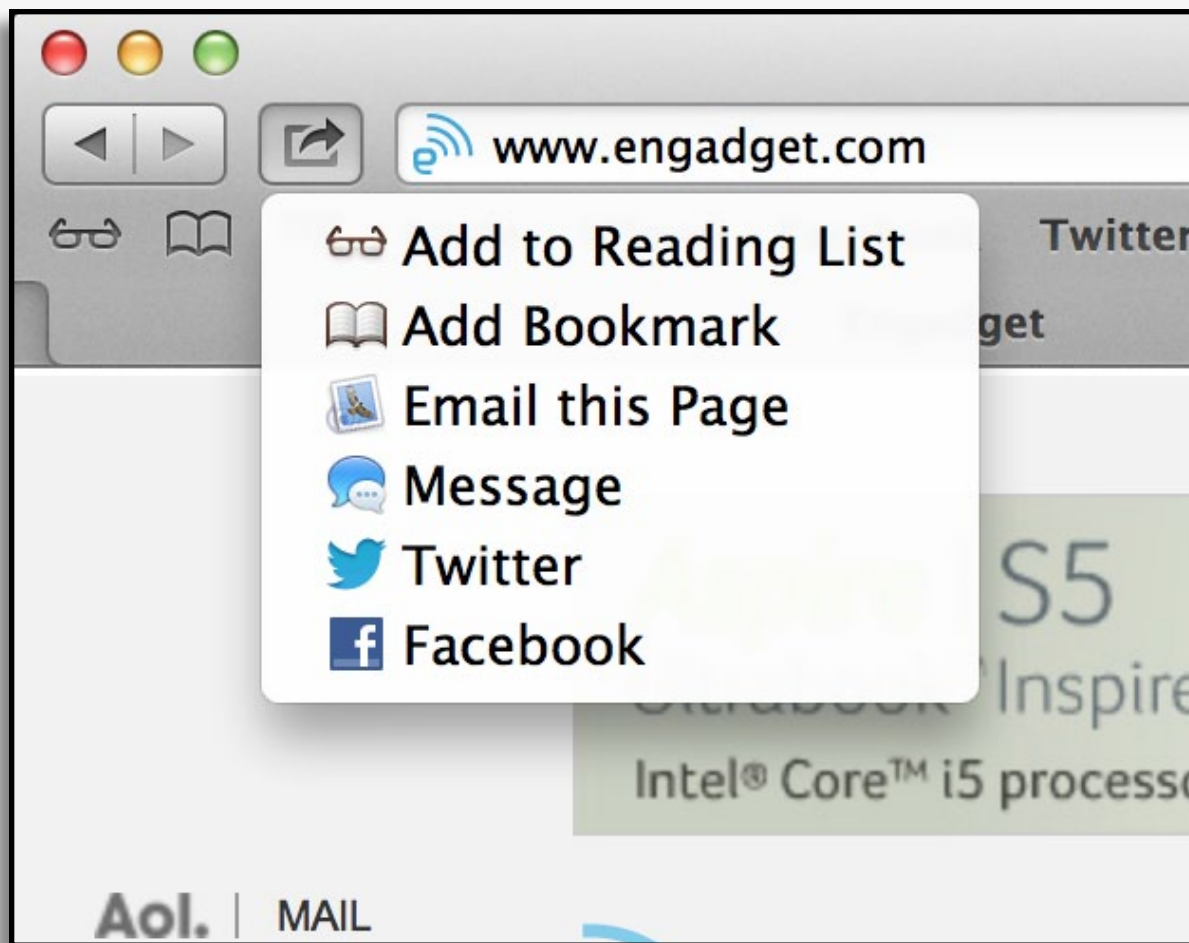
while, offers up compelling functionality for iOS users through iCloud Tabs, letting you pick up where you left off on your mobile device. It is, of course, not unlike Google's Chrome Sync feature, creating synergy between the companies' desktop and mobile operating systems. But while Chrome's recent appearance on iOS will likely lessen many users' dependence on Safari, as long as Apple's browser continues to be the default option on the iPhone and iPad, it's likely to continue to be the most popular web browser on those devices.

Speaking of tabs, the new Tab View feature does a good job incorporating the glass trackpad into the proceedings. Pinch with two fingers and the tabs will shrink down, arranged flat on a gray background, just under their

for too many people outside of Safari power users.

For all of Apple's unabashed love of all things cloud-based, one new Safari feature does actually manage to acknowledge the fact that we can't always live our lives online. Reading List, that icon with the little spectacles that sits along the bottom of the Safari toolbar, now does offline browsing, a feature that actually manages to distinguish itself from bookmarks, something Apple didn't properly manage in Lion. Save something to Reading List (either through the Bookmarks drop-down menu or the Share This icon next to the toolbar) and you'll have to wait just a bit while the system caches textual and graphic elements. And sure enough, if you fire up Safari offline, you'll be able





The now-pervasive Share button pops up in Safari to allow sharing of all things web, using a variety of methods.

is the new Password pane, which lives inside of the Preferences menu in Safari. Click through and you'll see a list of websites along with usernames and encrypted passwords. If you ever need help remembering one, click Show Passwords to bring up a dialog box, where

to read full pages, images and all — a handy little feature for reading news stories on the go, should you plan on taking your computer on the subway or on a plane that doesn't offer WiFi.

But what about the seemingly endless strings of passwords we're forced to remember? Has Safari done anything to make them easier to manage? We're glad you asked. When you first fire up the browser, Safari will ask, many times over, if you'd like it to remember this password or that. You can either agree, put it off for later or just do away with the question altogether. It's a bit of a nuisance when you're first getting started, but if you've got a machine no one else will be using, it's a useful feature, particularly for those who have more individual passwords than the human brain could be expected to retain.

Even handier (and more secure, too)

you'll enter your system password.

Once you've done that, you'll see your passwords listed, clear as day. You can also remove saved passwords from the pane, should you ever start to feel paranoid. Do Not Track, a privacy standard supported by browser bigwigs Microsoft, Mozilla and Opera, meanwhile, complements the privacy options offered by Private Browsing, helping to limit the amount of private information you let slip while browsing.

Performance has been enhanced, according to Apple, with hardware acceleration and Javascript bumps — and Safari is really quite smooth, particularly if you're using the trackpad to scroll. One minor, but handy improvement is the ability to rename bookmarks directly from the toolbar. Hold down a click on one, and Safari will highlight it, letting you make the change right there.





# iCloud



The iCloud sync setup interface and document view.

**WITH ICLOUD** at the epicenter of Apple's cross-device push, it's hardly a surprise that it's the cornerstone of this latest OS upgrade. Cloud-based storage is, after all, the glue binding much of the OS X and iOS experiences together, syncing your contacts, notes, reminders, calendar appointments and Safari bookmarks.

As such, the company has gone out of its way to simplify the process. Sign in with your iCloud account and Apple gives you a chance to opt out of syncing all the above-mentioned services, as well as set up Find My Mac, for locating and remotely wiping a lost PC.

Once signed in, iCloud lets you pick and choose which services you want to sync: Mail, Contacts, Calendar / Reminders, Notes, Safari, Photo Stream, Documents, Back to My Mac and Find my Mac. After you opt in, Apple will begin the great syncing, pulling data from your iOS devices onto your computer and vice versa. If you uncheck one of the elements, it will remove the synced data from your computer (though not before warning you). The primary iCloud page also offers up a status bar on the bottom, letting you know just how much of that iCloud stor-

age you're currently using.

A feature that was unavailable back when Mountain Lion first arrived in beta, the Documents Library marks a big step forward for iCloud. Just save something in a cross-device app like Pages, and it offers up a drop-down menu of locations, starting with iCloud, which makes that file accessible on devices signed into that account. Accessing the Library is as simple as clicking Open in an app with that functionality. From here, you can open the doc to read or edit, duplicate it, rename it or transfer it via email, AirDrop or Message, courtesy of the Share button. Docs can be viewed as icons or lists, and can be sorted by name, date and size. You can also create folders by dragging one doc onto the other, iOS-style. Documents can also be dragged and dropped from the Library onto your desktop and vice versa.



# Auto Save, TextEdit and Notes

**PINCH-TO-ZOOM**, another “sure, why not” feature, has been brought over to TextEdit, letting you adjust text size using the trackpad. It’ll save your cursor a trip to the toolbar, but mostly it feels like another step in Apple’s eventual plan to incorporate that functionality into all of its native apps. And, again, why not?

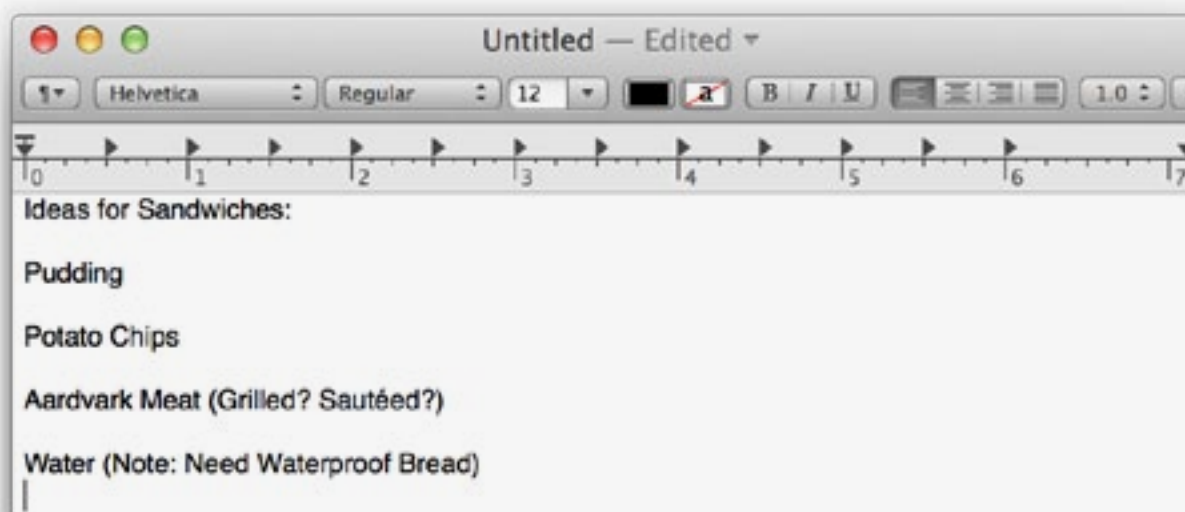
The MacBook’s got a great trackpad — might as well get as much use out of it as possible. Still, the implementation isn’t perfectly smooth here — once

pinched, the text takes a moment to snap into place.

The Auto Save functionality introduced the last go ‘round has been peppered with some

additional features.

Clicking the name of an open file in TextEdit brings up a number of features, including Rename, Duplicate, Move To, Lock and Revert. Choosing Rename





highlights the title, offering up a quick and easy way to affix a new name to the file. Command-Shift-S and Command-Shift-Option-S have been added to the keyboard shortcut arsenal for easy access to Duplicate and Save As, respectively. The “Move To” option, meanwhile, offers Apple yet another opportunity to integrate iCloud, letting you transfer anything saved to your desktop to that ethereal land of infinite document sharing.

Actually, by saving to your desktop, you’ve already skipped out on an iCloud opportunity. Apple has front-loaded the feature, making it the default location for saved documents. Of course, you can also save to your desktop, if you’re still living in a localized, pre-cloud universe. Saving to iCloud lets you share your documents across other OS X devices. If you want to edit a doc created in TextEdit on an iOS device, however, you’re out of luck — it only works on Mac-to-Mac

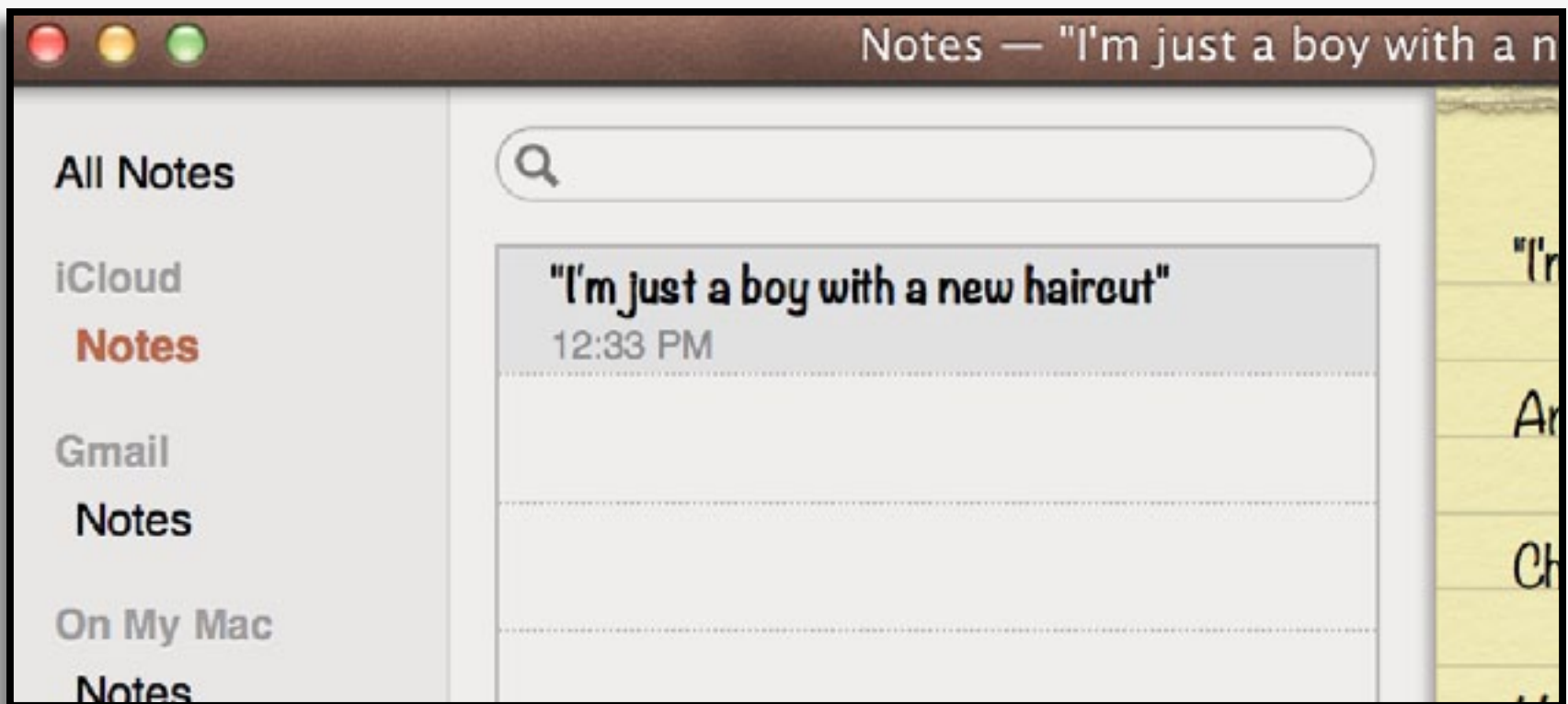
Another app cribbed from iOS, Notes offers searchable time- and date-stamped collections of text, links and images, all presented on the classic lined notepad style paper.

transfers for the time being. If you save a file in Pages, however, you’ll get that cross-platform functionality.

iCloud plays a key role in Notes, another feature borrowed wholesale from iOS. Apple describes its functionality thusly: “Jot down things you need to remember and easily find them later.” Easy enough — and really, it’s mostly as simple as it sounds. After all, it was a program designed for making quick notations on the go, on a small screen. The program does, however, offer up more functionality than its Post-it-esque predecessor, Stickies (which, for the record, managed to avoid the 10.8 chopping block). The interface looks like a pad of well-loved legal paper, with a few sheets already ripped out. Typed text shows up on the notebook lines in customizable and optional bullet points and numbered lists. Images and attachments can be added as well, simply







by dragging and dropping them directly onto the app, for a more accurate representation than you're likely to be able to sketch out on your real-life notepad. Handier still are links, which, when highlighted, can also be dragged and dropped right onto the paper.

Along the top, you get the date and time and an option for expanding the little app to full-screen, if you're the sort who loves to cram a lot of information onto a single page. Along the bottom are a trashcan for dumping notes you no longer need (what, no crumpling paper animation?) and an option for sharing the text via email or Messages. To the left of the sheet is a list of the notes you've made and above that is a search bar for finding something amongst the pad. Double-click a note in the list, and it'll get "pinned" to the desktop, staying open after you close the app. At the bottom is a big Plus for making new notes. Click the button just to the right of that and you'll get a broader list of notes across devices. Yep, Notes is connected to iCloud too, get-

All your bits of information in Notes are transmitted to the cloud for synchronized access across OS X and iOS devices.

ting pushed to connected devices in a matter of moments. Click the Plus icon next to the list items, and you can organize your notes into sub-folders.

The addition of Notes in Mountain Lion makes the app all the more necessary for those using both OS X and iOS. It's a truly handy tool for keeping track of those little bits of information that might otherwise get lost in the shuffle. The changes to Autosave are welcome, as well — anything that makes it harder for us to accidentally lose our hard work is alright by us. TextEdit has certainly received some nice boosts, particularly its broader integration with iCloud. Apple's clearly looking to take on Google Docs here, though we'd be hesitant to make the jump, given that Docs is more accessible on more platforms. If, however, you're an iOS / OS X devotee who already uses Pages, this integration will certainly make your life a heck of a lot easier.



# Dictation

**THOSE HOLDING** their breath for the arrival of Siri on the desktop will likely be pretty blue in the face until this time next year — the cheeky personal assistant isn't on the list of Mountain Lion's 200-plus features. Apple has, however, seen fit to bring Dictation over to OS X in a major way, incorporating it into any

app that involves typing. This means Pages, TextEdit, Notes, Mail — heck, you can even type in Gmail, so long as it's open in Safari. You can also put it to work in third-party applications — we were able to dictate Gmail messages in Chrome, for instance, though we couldn't quite get it to work in Google Docs, regardless of whether we had it open in Safari or Chrome.

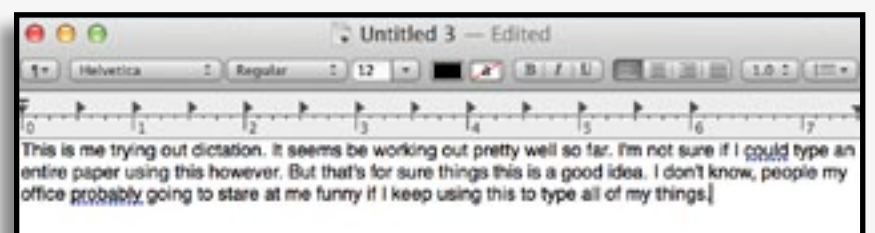
Hit the Function key twice (you can also change this command in the settings), and a small microphone glowing purple will appear in a word bubble off to the side of the app. Speak slowly and clearly, hit Done when you're finished, and it'll get to work. We gave the feature a test drive and were pretty impressed with what we saw:

THE ACTUAL SPOKEN TEXT WAS:

This is me trying out dictation. It seems to be working out pretty well so far. I'm not sure if I could type an entire paper using this however. But perhaps for short things this is a good

idea. I don't know, people in my office [are] probably going to stare at me funny if I keep using this to type all of my things.

RESULT:



One or two fumbles. Still, not bad for a first go. And yeah, this writer has been told that he has a tendency to mumble. For periods, simply say "period." It's the same with commas and question marks and commands like "all caps" and "new paragraph." It's all quite straightforward and easy to use the first time you give it a shot. It currently supports US, UK and Australian English, Japanese, German and French. But again, it can't do much about your coworkers staring at you while you talk to your computer.



# Mac App Store and Game Center

**THE MAC APP STORE** gets some upgrades here, too: app update notes show up in the Notification Center, you can use the trackpad to swipe between pages in your App Store history and a Share button lets you broadcast your app discoveries over Twitter, Messages and Facebook. And since Mountain Lion is only available through the App Store, it makes sense that all OS X upgrades come through there as well, downloading automatically for your installing pleasure. App updates auto-download as well, and all new applications you download will get pushed to other computers tied to your account.

Oh, how people would have laughed at you 10 years ago, had you told them that one day, Apple would become a kingpin in the gaming world. Yet in a relatively short amount of time, the company has managed to go from a virtual non-presence in gaming to the creator of one of the industry's most popular platforms. Of course, that popularity grew mostly independently of Apple's desktop operating system. Having managed

to capture the imagination of slews of mobile gamers, the company is now looking to translate some of that success into the desktop experience, offering up an OS X version of Game Center, the social gaming experience first introduced for iOS 4.

The primary reasoning behind bringing the feature over to the desktop seems to be the opportunity to allow OS X users to compete against iPhone and iPad owners in multiplayer games in an already bustling ecosystem (with 130 million registered accounts, as announced at WWDC in June). Sign in with your existing account and you'll bring over your info from iOS. Through Game Center, you can find friends and opponents. Game Center also offers up in-game voice chat, parental controls and, of course, notifications, which alert you to friend requests and invitations, and tell you when it's your time to play a turn-based game.

Unfortunately, you're going to have to re-buy / re-download the OS X version of the games — and at the time of this review, that selection is pretty sparse. We can certainly see the appeal of maintaining scores across devices and playing against pals with iOS, but at the moment, we can't see the desktop version of Game Center becoming vital gameplay — at least not in the near future.





# Gatekeeper and Security



**WHEN APPLE** first tipped us off about Gatekeeper, we were admittedly skeptical.

We're all for security, especially in a world where OS X is an increasingly popular target for hackers, but as OS X begins to look more like iOS, it runs the risk of becoming a far less flexible environment. Let's be honest: Apple craves fewer things more than complete control over its hardware and software, even if that means severely limiting the influence of third parties. Gatekeeper seeks to reduce the presence of malicious applications on your system. By default, your system is set up to only accept downloads directly from the App Store or identified developers — a fact that leads to dialog boxes such as this one:



This can all be adjusted by heading to the Security and Privacy pane in System Preferences, where you can ratchet up the security (allow apps downloaded from Mac App

Store) or pare it down (allow apps downloaded from anywhere). Apple would no doubt love to restrict your downloads to its App Store. But even when extended to include non-App Store downloads by companies with a Developer ID, legit apps can still get flagged (see: Spotify). Of course, Apple's been working double-time to get developers signed up ahead of Mountain Lion's launch — worst case scenario, you can always switch settings when you need to download an app not listed in Apple's database.

Though Gatekeeper is the primary security addition to Mountain Lion, Apple's got a few more tricks up its sleeve to tackle the aforementioned ever-growing threat against OS X. The OS promises to check for security updates every day, and, Safari, Mail, Reminders, FaceTime, Game Center and Notes all join the list of sandboxed applications. Kernel ASLR malware protection and FileVault management tools are on-board as well. According to Apple, the encryption being offered is currently in the process of getting its FIPS 140-2 certification, to help meet government's standards. We're not seeing the kind of focus on security enhancements that Microsoft talks up with new Windows releases, but Apple does seem to be coming to grips with the fact that, yes, Macs can get malware.





Dashboard sports a new, roomier configuration and allows you to create folders to organize widgets.

# Dashboard and Launchpad

**AS EVER**, Dashboard is always just a three-finger swipe away. Not a ton has changed from a UI standpoint, but Apple's apparently looking to bring more folks over to the barebones interface by making widgets easier to discover. Swipe your way in and you'll see Plus and Minus buttons at the bottom of the screen.





Search bars have been added to the top of Launchpad and Dashboard for searching amongst your collection of apps and widgets. As a bonus, irrelevant apps disappear as you continue to type.

Clicking Minus brings pop-up Xs on top of your widgets, so you can get the ones you don't want out of your sight (so long, Ski Report). Hitting the Plus will bring a list of all the default widgets — pretty much the same selection offered up in Lion, albeit in a slightly roomier configuration. Click a widget and it'll appear on your main Dashboard page. You can also hold down on a widget and then click to transfer it to the front of the Dashboard.

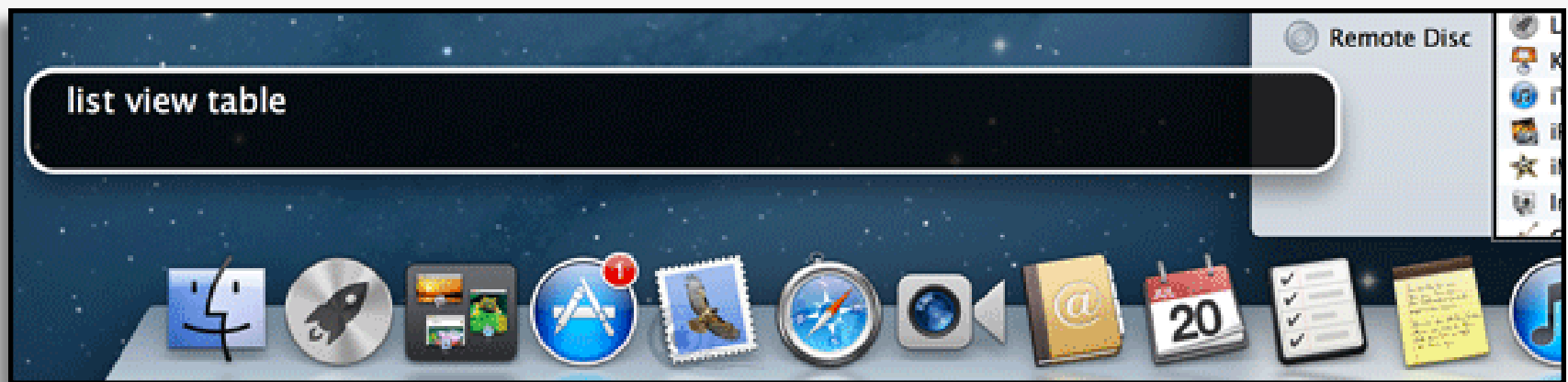
Along the top of the page is a search bar so widget hoarders can find an item amongst the clutter. As you type, widgets that don't match the description will begin disappearing. Need something that's not stored locally? Click More Widgets and you'll be magically whisked away to

Apple.com's Dashboard page, where you can download around 3,900 widgets — at last count. Oh yeah, and you can add widget folders to the list of borrowed iOS features. From the Dashboard browser, simply drag one widget icon onto another and the screen will split, revealing the contents of your newly created folder. Once created, you can keep dragging more icons into the folder (you can't drag a folder into a folder however — let's not get greedy). To make a folder disappear, simply drag all of its contents out.

Launchpad, Lion's boldest step toward an iOS-like interface, is still present in Mountain Lion, accessible via the dock, a click of F4 (on newer-model MacBooks) or by pinching the trackpad with three fingers and a thumb. The Mac app interface looks nearly identical to its predecessor: rows of mobile-inspired icons atop a blurred desktop backdrop. As with Dashboard, however, Apple's added a search bar to the top of the screen, with irrelevant apps disappearing as you type.







The visual element of VoiceOver's spoken text.

# Accessibility

**APPLE HAS ALSO DONE** a bit to make Universal Access more, well, universally accessible, beginning with the name, which has been truncated to Accessibility — a name borrowed from iOS (naturally). The pane offers up various options to help users with disabilities customize their experience (it's possible for both sighted and visually impaired people to do this). Apple has also improved Accessibility through a new keyboard shortcut — Command-Option-F5 — which brings up a simplified version of the menu, anywhere in the operating system. From here you can enable the zooming of features (via keyboard shortcuts or scrolling), VoiceOver, adaptable keys and display configurations like color inversion and contrast adjustments.

More complex Accessibility features can be accessed by hitting Preferences in that window, or by locating them the old-fashioned way, through System Preferences in the dock. In Mountain Lion, the settings are a bit easier to navigate —

a vital consideration for this user group. The push buttons on the top of the pane have been traded in for a simpler, easier-to-navigate side panel with large icons, offering up options in the category of Seeing, Hearing and Interacting (which combines the Keyboard and Mouse & Trackpad offerings from Lion). Again, simplicity is the thing here. Graphical user interfaces can be quite difficult to navigate for the visually impaired and people with other disabilities — there's no need to clutter them up unnecessarily.

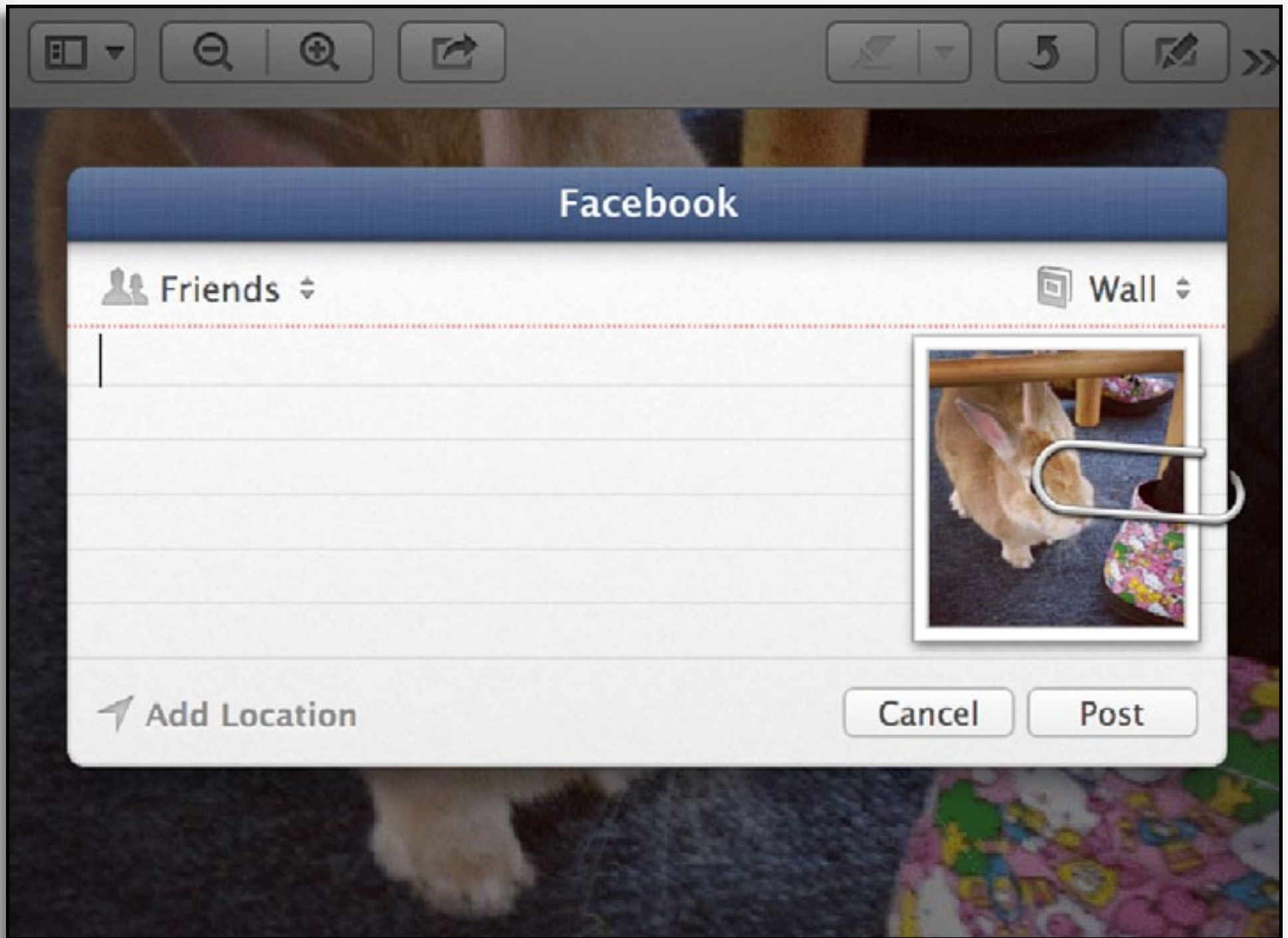
Mountain Lion also ushers in some revised features in Accessibility. VoiceOver, which translates onscreen elements into spoken text, gets the most love here, with drag-and-drop functionality coming via modifier keys and the ability to press and hold buttons and reorder tables. The latest big cat release also sees the introduction of 14 new Braille displays. There's nothing particularly groundbreaking on this front, but it's definitely nice to see Apple expand its support for users with disabilities.



# Power Nap

**WHAT'S THE OLD SAYING?** If you can't nap longer, nap harder? Pretty sure it's something along those lines. That's the driving force behind Power Nap, an attempt to put your system to work, even while it's sleeping. The new feature, introduced in 10.8, works while your system is in sleep mode, whether plugged in or running off of battery power, performing Time Machine backups and delivering updates that you can install the minute the machine wakes back up. Mail, Notes, Reminders and Messages all get delivered as well, without the addition of fans or system lights. And, it works whether your machine is napping with its lid up or down, all without spinning up any fans or using a lot of power — however, it's only going to work if your system has flash-based storage. Pretty cool feature, all in all.





# Preview

**EVEN POOR**, oft-neglected Preview gets a little bit of feature love this time out. The image / PDF viewer gets sprinkled with the normal assortment of Mountain Lion features, including Sharing (via Email, Message, AirDrop, Twitter, Facebook, Flickr and iPhoto) and Documents in the Cloud, so you can check out those images and PDFs

on the go — pretty handy, that. The PDF functionality gets some bumps as well, detecting text fields for you to fill out and letting you add inline notes. You can also search notes and highlights and plug scanned images and pages into PDFs, going a ways toward making you a little less reliant on yet another Adobe product. Oh, Apple, you scamp.







# Features for the Chinese Market

**GIVEN APPLE'S** growing presence in China, it should be no surprise that Mountain Lion comes with plenty of localized goodies designed to lure in more desktop users there. For instance, those who choose China as the system's region will see a few extra options in "Mail, Contacts & Calendars" under System Preferences (after logging out and





With your system's region set for China, you'll get a choice of popular Chinese mail services and with the enhanced user dictionary, you can look up words with a three-fingered tap.

back in again, that is). Three of those are popular Chinese mail services: 163 Mail, 126 Mail and QQ Mail. You also get Sina Weibo – China's most well-known microblogging platform, which works very much the same way on Mountain Lion as Twitter. Finally, for video sharing, the list includes Youku and Tudou, though strangely enough, these are only via the Share button in QuickTime and not iMovie. We guess it's only a matter of time before Apple provides a more convenient way for Chinese users to share their videos.

Most other Mountain Lion features for China are related to text input. While we're not exactly experts in every single type of Chinese input method,

Apple claims it has significantly expanded on the existing offerings, especially handwriting recognition and the pronunciation-based Pinyin (including the newly added Fuzzy Pinyin to cater to different regional accents). Most notably, in Pinyin mode you can now type in English within a Chinese sentence without having to switch keyboards like in the olden days — your English words would simply show up as an option in the suggested word list.

Speaking of which, Mountain Lion will also quietly update its library to enhance its phrase suggestions over time, and the Chinese user dictionary gets the same iCloud sync treatment as its English counterpart. If you do get stuck with certain Chinese words, fret not, because OS X will now come with a simplified Chinese definition dictionary, so you can look up Chinese words by tapping on them with three fingers (tip: if your system's set up in English, you'll need to activate the Chinese dictionary in the Dictionary app). Alas, this is only a Chinese-to-Chinese dictionary, and it's just in simplified Chinese (Hong Kong, Macau and Taiwan still use traditional Chinese), so some users will still have to rely on third-party solutions.

Other tidbits include the addition of Baidu as an optional default engine in Safari (to be honest, many advanced users would probably prefer sticking with Google for all sorts of sticky-icky reasons), as well as eight new Chinese fonts (though only four of them include traditional Chinese characters).





# System

iPhoto adds a new Faces feature that lets you tag people (or foxes) in photos making them easier to find for adding as account, Contact or Messages pics.



**THE MOST PREVALENT** tweak on the system side has to be the beefed-up scroll bars. Anyone who's had trouble grabbing ahold of the disappearing / reappearing page movers will appreciate the ability to expand / change the color of the things by hovering over them. Those engaging in screen sharing, meanwhile, will like the ability to just drag and drop files between computers for transferring. The full-screen app mode, which was introduced back in 10.7, has been extended to secondary displays. This isn't a huge change, mind you — in Lion, you could have an app go full-screen in an external monitor, so long as it was set as your primary display. Also, as with Lion, your other monitor will be blocked out when in full-screen on one of the displays, which kind of defeats the purpose of the whole dual-monitor thing.

Screen saver gets a little love, too.

There's a slew of new slideshow viewing options, including a panning one named after our documentarian pal Ken Burns, who already got a nod over in iMovie. Click one of those options and you can choose the source of your photostream from a drop-down menu, including default folders like National Geographic, Aerial and Cosmos or your own shots. The new Faces feature in iPhoto lets you tag people in pictures, making it easier to choose images when time comes to pick a profile pic or putting faces to the names in Contacts.

While we can't personally claim to be heavy Font Book users, the new Smart Collections feature is pretty neat, letting you group different styles together by refining search criteria. Speaking of collections, the Xsan 3 cluster file system is on-board for shared storage, as is an X11 install on demand link if you should happen to need it for a particular app.



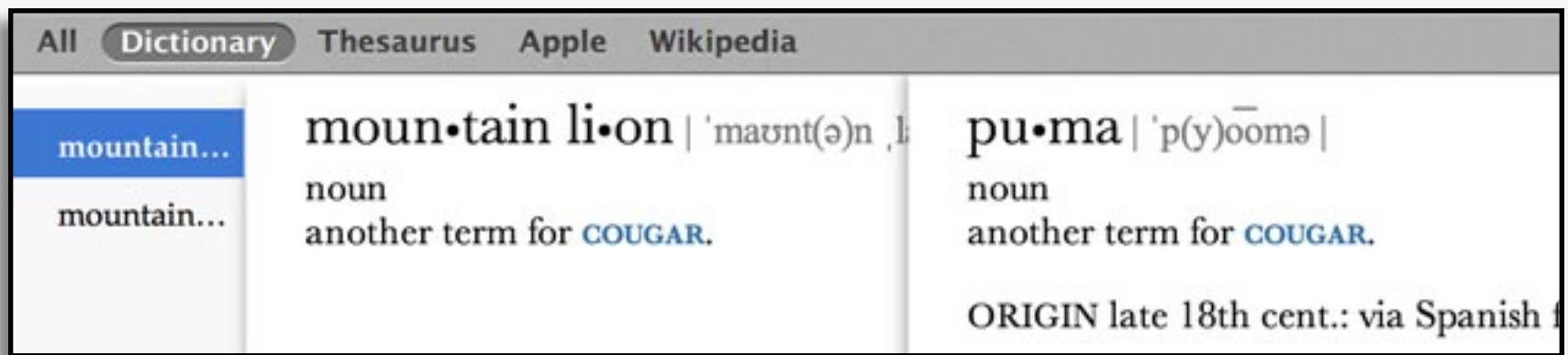




# Performance

**APPLE HINTED** at some small performance enhancements, but the company isn't exactly broadcasting them as a selling point for 10.8. Overall, we found the performance to be quite brisk — we ran our standard OS X benchmarks, Geekbench and Xbench, and saw slight performance boosts versus the numbers we got with the same Retina display MacBook Pro running Lion. It wasn't a huge gain by any stretch, but we'll never argue against a performance boost, no matter how minor.





# Odds and Ends

- Photo Booth's getting Sharing, naturally, with options including AirDrop, Messages, Mail, Facebook, Twitter, Flickr and Vimeo. The Sharing menu also makes it possible to pick a new Twitter profile picture directly from Photo Booth.
- That old Apple workhorse videoplayer, QuickTime (now in version 10.2), gets a couple of minor upgrades, including "high performance" H.264 encoding. Naturally, too, you get built-in sharing here, letting you share the next *Citizen Kane* via email, Message, AirDrop, Facebook, YouTube, Vimeo and Flickr.
- Time Machine gets simple encryption this time out — just click Encrypt Backups during the setup process. It's also possible to choose multiple locations from within Time Machine, so you can backup your computer to work and home drives.
- The Dictionary gets some trackpad functionality in this build, as well. Now you can use a two-fingered swipe to flip back and forth between searches, just like the olden days when they used to make books out of paper. Mountain Lion also now offers dictionaries in Simplified Chinese, Spanish and German — weirdly, there's no share button here. We can't be the only ones who were looking forward to posting some hot definitions on Twitter.



QuickTime gets an upgrade and includes sharing directly from the app. Now you can share that Yacht Rock video, if only you could find someone who hasn't already seen it.







# Wrap-Up

**LET'S GET THIS OUT OF THE WAY**, shall we? Does Mountain Lion justify its \$20 price tag? Yes. Of course it does. If you're an OS X user with a reasonably new piece of hardware, stop what you're doing and upgrade now. There are 200 features here — odds are you're going to discover a couple you like. Better yet,





# Does Mountain Lion justify its \$20 price tag?

## Yes. Of course it does.

if you picked up your system from Apple or an Apple Authorized Reseller on June 11th or later, you can get it for free. AirPlay Mirroring, Messages, Notifications and some great new uses for iCloud make for an extremely solid upgrade. In our time with the new operating system, we experienced no major issues; just rare hiccups that are likely to be fixed in a system update. Heck, even the installation went smoothly. Apple devotees will find a lot to like amid the long list of tweaks and new features.

Taken as a whole, the features mark a fairly aggressive bid to fold the best of OS X and iOS into one product — a strategy we first saw with the introduction of the Mac App Store on Snow Leopard, and with the arrival of Launchpad last year in Lion. Fears that the operating system has become more walled-off in the face of these moves are mostly overblown — for now, at least. GateKeeper and the App Store hint at how Apple might seek to regulate the OS X experience to the degree it does on iOS, where content from outside the App Store's heavily vetted selection is strictly forbidden (though not expressly illegal, of course). Moving ahead, we hope the company continues to allow end users to download whatever they please.

As for that question of precisely how fresh OS X feels — it's not quite fair to compare the change between Lion and

Mountain Lion to the steps between Windows 7 and 8. After all, the company has mostly been keeping to a yearly upgrade schedule, and while OS X has maintained a fairly consistent aesthetic presentation since it was first released on the world back in 2001, every upgrade has brought with it key features, and the end result is a very different operating system than the one we were introduced to more than 10 years ago.

That said, it seems time for Apple to make a bold new pronouncement on the desktop front. The company appears to have most of its resources invested in the mobile side — and there's no question as to why: the iPhone and iPad have reinvigorated the company, making it a computing player on a scale that no one (save, perhaps, for Steve Jobs himself) could have predicted a decade ago. Still, it might be hard for OS X users *not* to feel neglected — many of the latest new features feel a bit like iOS hand-me-downs. When and if Apple rolls out a new operating system this time next year, hopefully we'll be seeing a very different side of Mac OS. 

*Tim Stevens, Richard Lai and Zach Honig contributed to this report.*

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*Brian's work has appeared in Spin, The Onion, Entertainment Weekly, The New York Press, PCMag, Laptop, and various other publications.*





# ESL

DISTRO  
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VISUALIZED

## H.E.S.S. II GAMMA-RAY TELESCOPE



On July 26th, the largest Cherenkov telescope ever built opened its mirrored eyes to the skies over Namibia. Searching only for extreme gamma-ray phenomena such as supermassive black holes, pulsars and supernovae, this 28-meter-wide marvel marks a great step forward in ground-based gamma-ray astronomy.

PHOTO: H.E.S.S. COLLABORATION, CHRISTIAN FÖHR





# ERIC JIN

**HTC'S MANAGER OF  
PRODUCT STRATEGY** talks  
missile naming conventions,  
wearable computers  
and *Space 1999*.



**What gadget do you depend on most?**

My smartphone, of course.

Whichever one I'm using at the time, I pretty much live and die by it. It's my link to everything I care about.

**Which do you look back upon most fondly?**

I don't look back at my gadgets of





**“Missiles get the best names. Seriously. And I’m not even talking about the ones we can all make jokes out of like ASRAAM.”**

old with some sort of gauzy heart-felt reminiscence. But I think the coolest thing I ever owned was a PowerBook 280. I bought all sorts of modification kits for it from Japan and poured far too much time and money into what was essentially the smallest, most under-powered laptop of its time.

**Which company does the most to push the industry?**

I think people want to say it’s Apple, and they do a great job of picking a recent standard and speeding up adoption (USB, Thunderbolt, microSIM), but I think the industry as a whole is pushed from the periphery by small guys who can execute on a crazy idea because they don’t have a legacy or bureaucracy holding them back.

**What is your operating system of choice?**

For computers? I’m a Mac guy. Have been since forever. For phones? Well, I WANT to say

Windows Phone, but the truth is Android. Google Maps alone is worth its weight in gold.

**What are your favorite gadget names?**

Are missiles gadgets? Because, man, missiles get the best names. Seriously. And I’m not even talking about the ones we can all make jokes out of like ASRAAM. Hellfire? Bull pup? Sidewinder? Pegasus? I mean, come ON. How awesome are those? Nothing in the gadget world has a name half as cool as missiles.

**What are your least favorite?**

Well, thank science the extreme, Xtreme, Xtrem trend is over. That’s all I can say. Barring that, clone names. Oh, a popular product is called Daisy? My competitor is called Daffodil. UGH.

**Which app do you depend on most?**

Just one? Twitter, I guess. I would be so disconnected without it. (I’m not saying Chrome because I feel like that would be cheating.)

**What traits do you most deplore in a smartphone?**

They’re so hard to put down. Some days I find myself getting to the gym an hour later than I planned just because I got caught in the Tumblr, Twitter, Instagram, etc. catch-up time hole. That or the bulk. I wish they could just disappear.



**Which do you most admire?**

They're computers. IN. OUR. POCKET. Connected to everything the world knows. All the time. That is so amazing. I could never have dreamed up something half that awesome when I was a kid.

**What is your idea of the perfect device?**

I think smartphones, or any personal gadget needs to be a lot smarter, a lot more polite, and way less bulky. Something wearable so that it's a part of me, but also that I can take off. When I was young I wanted *Neuromancer*-style implants. Now I realize it's nice to be able to silence technology, or avoid it, from time to time.

**What is your earliest gadget memory?**

Probably all the cool gadgets they had on *Space 1999*. Man, even as a 5-year-old I remember thinking how much smarter their gun was than *Star Trek's* because it was so much more ergonomic, and it dou-

bled as brass knuckles. Or Merlin. It was a silly handheld game with 11 touch pads, each with an LED inside. And you could play all these various brain teaser / puzzle games on it. It was stupid, but back then it seemed so high-tech.

**What technological advancement do you most admire?**

I was born before the public internet, and honestly I don't think anything has changed my world so positively as that. But these days, I look at the awesome advancements we're making in genetic engineering to battle diseases, or even reverse them, and that is what I fully expect to admire next. Or maybe prosthetics. Holy crap are modern prosthetics becoming amazing — from the motor- and sensor-laden devices like Dean Kamen's Luke Arm to the totally processor-free but still powerful units like Cheetahs. This year's Paralympics are going to be incredible.

**Which do you most despise?**

The car. Or really the way the car allowed the concept of commuting to evolve. Living in one place and working in another. Sitting in a little tin box to get back and forth between them. Really, I don't think the car's done anything good for us. I mean, sure, I think the Aventador is the hottest thing I've seen with my own two eyes, but I still hate cars.



**“Sure, I think the Aventador is the hottest thing I’ve seen with my own two eyes, but I still hate cars.”**

**What fault are you most tolerant of in a gadget?**

I’ve learned to tolerate pretty much every failure in the book when something is still in beta or unreleased. But once a product is released, I’m pretty much only tolerant of faults that I know can be fixed with some sort of firmware / software update.

**Which are you most intolerant of?**

If I buy something and it can’t even do the simple task I bought it to do, I get furious. I hate when I have to fight with a digital camera to take a picture, or when the WiFi gadget I buy won’t connect to my WiFi network. Basically, anything that’s fussy about completing its core task infuriates me.

**When has your smartphone been of the most help?**

You mean besides settling all the dinner disputes or lapses in memory? Google Maps has gotten me out of some amazing jams in foreign places both domestic and overseas. Plus, not having to carry around a paper map means I don’t have to

look like a total tourist anymore.

**What device do you covet most?**

I know I should covet expensive cameras or lenses or something, but really the only time I’m jealous of is when friends tell me they’ve gotten a laser cutter / etcher.

**If you could change one thing about your phone what would it be?**

It would be smaller, but without sacrificing battery life


**What does being connected mean to you?**

Everything, literally. Even though I remember what it was like before, I can’t imagine being disconnected. I can’t imagine being somewhere and not having an expert on everything at my fingertips, or not knowing what was going on in the world.

**When are you least likely to reply to an email?**

Pretty much always. I hate email. I let them sit around for days unanswered. I get like one interesting email (real email, as opposed to Facebook message or something like that) per month. It took me about a week just to write this one.

**When did you last disconnect?**

Two years ago, for six days, but next month I’m doing it for two weeks and I can’t wait. 





# KIBOKO 22L+



Galaxy  
Nexus  
HSPA+ with  
Jelly Bean



Corsair  
Vengeance  
K90  
Keyboard

**I'VE TRIED** A plethora of camera-minded backpacks over the years, from Kata's 3N1-33 to a couple from Maryland's own Ona Bags. Recently, I was able to strap Gura Gear's Kiboko 22L+ on for size. It's a \$379 purpose-built bag that's capable of carrying most 15-inch laptops (as well as Apple's outgoing 17-inch MacBook Pro) alongside a litany of camera lenses, bodies and accessories. The primary differentiators here are the "butterfly-style" openings. To me, this design solved the "my lens is stuffed under another lens!" issue that many conventional bags face.

I was able to fit a Nikon D3S, a D3200, Rode VideoMic Pro, Steadicam Merlin 2, a Gorillapod, a lens cleaning kit, remote trigger kit, three battery chargers and

six lenses (all under 70mm) into the bag. That's a lot of kit, and there are two ways to look at the results. On one hand, it's actually capable of safely containing all of that in a bag that'll fit into the overhead bin of an Embraer 175 (seriously!). On the other, the carrying mechanisms simply aren't designed to hold that kind of load long-term.

Sadly, the pack's rear is entirely flat (i.e. not curved with the shape of your back like Kensington's magnificent Contour). After 60 minutes of carrying it around Yellowstone National Park, I was aching in a way that I've never ached with my Contour. Sure, you could use either of the two (remarkably sturdy) carry handles, but with that much weight, even that's a poor choice. While I'm thrilled with the unit's overall internal design, its rigid / rugged nature and the lovely zipper pulls, the \$379 price point is tough to swallow given the somewhat disappointing rear strap system. Those carrying lighter loads, however, will find plenty to love.

—Darren Murph



# GALAXY NEXUS HSPA+ WITH JELLY BEAN



Kiboko  
22L+



Corsair  
Vengeance  
K90  
Keyboard

I'D BEEN AN IPHONE user since way back in the silver old days, when 3G was becoming the new standard and EDGE was all I had to help me through everyday browsing. But that all changed recently (last week, in fact), after I suddenly became weary of iOS. Now, don't get me wrong, I think Apple's mobile operating system is great – maybe even the best there is. Still, I needed a change, and the obvious choice for me was to go with Google's flagship handset, the Galaxy Nexus.

Why, you ask? For one, I went with the HSPA+ variant being sold in the Play store. Thus, I didn't have to extend my two-year deal with AT&T, and since it's an unlocked model, I can use it with mostly any GSM carrier worldwide if need be. Not to mention, it's a bargain at \$349 (plus shipping and tax), and I'm likely to always be first in line when Mountain View decides to roll out its latest and greatest software treats. Speaking of

which, Jelly Bean was served to my GNex over-the-air soon after my initial setup – a nice welcoming gift, to say the least.

It's now been a little over a week since I made the jump to Android, leaving behind a good amount of invested cash back in Cupertino's ecosystem. That said, I don't regret my choice one bit. So far, the Nexus has been a great sidekick; it runs smoothly, offers all the apps I want and, more importantly, can get through the day without a recharge – something I can't honestly say about my iPhone 4S. If only I could match the Nexus' rear camera with that marvelous 4S shooter, everything would be just perfect.

All in all, it's been a great ride so far, and you know the mythical "Android lag" folks speak of? It's non-existent in the Galaxy Nexus. For my sake, I hope this continues to be a great experience, but if anything changes, you'll be among the first to know. For now, I'm quite content with my pick, even if I have trouble fitting it in my jean pockets from time to time. –Edgar Alvarez





# CORSAIR VENGEANCE K90 KEYBOARD



Galaxy  
Nexus  
HSPA+ with  
Jelly Bean



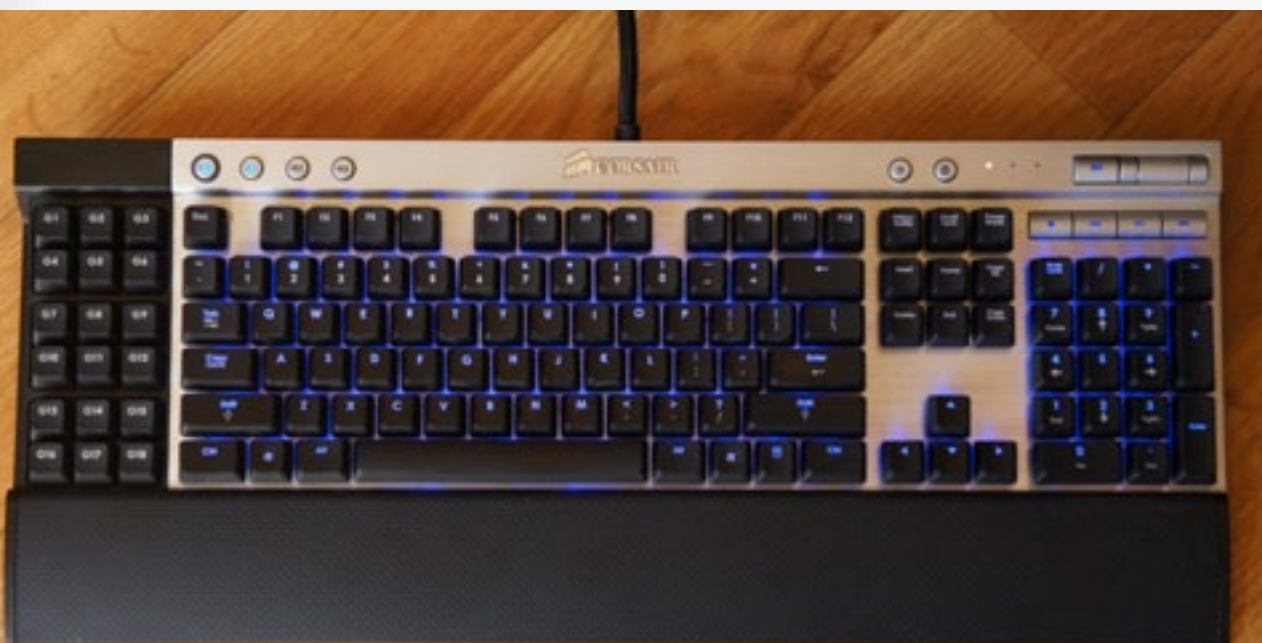
Kiboko  
22L+

**BETWEEN INTEL'S** Ivy Bridge and NVIDIA's latest Kepler GPUs, I couldn't help myself; 2012 was the year I set out to build a new gaming rig. When one concedes one's bank account to the burden of assembling a machine of raw power, it's easy to justify a handful of pricey peripherals. That's how I came across my new mechanical keyboard, the Corsair K90.

It started in the keyboard aisle of my local electronics retailer – my fingers danced across the keys of various demo units until they stopped on something loud, clicky and familiar. Having been raised on the tactile typewriters of yore, the K90's Cherry MX Red mechanical key switches felt like coming home. Soon, depressing any other type of key felt wrong – which was

really too bad, because doing so is unavoidable. The K90's magical mechanical keys are surrounded by membrane toggles that feel cheap by comparison. None of the keys stick – nor do they feel particularly mushy – but switching from mechanical to membrane can be a bit jarring. I eventually adjusted, but the inconsistency still nags at me.

As much as I love the keyboard's fancy switches, it has other notable features. In addition to a few standard media keys and blue backlighting, the K90 features 18 programmable buttons (all membrane, unfortunately.) These are designed to help serious MMO players micromanage in-game macros – they work well, but the companion software isn't particularly straightforward. In the end, the keyboard has its quirks, but its solid build and Cherry switches overshadow its faults. It's a proud part of my PC gaming arsenal – though in retrospect I might have paid a premium for a clacker with consistent keys. –Sean Buckley





The week that was  
in 140 characters or less,

# APPLE VS. SAMSUNG AND NBC VS. THE WORLD

**@Gartenberg**

Despite reporters best efforts, news of Apple v. Samsung slightly more interesting than watching paint dry. Nope, paint more interesting

**@karaswisher**

most disconcerting blog headline of late: Report: Apple considering an investment in Twitter (update: maybe not...)

**@bheater**

On the last day, do they play a game that combines all the other games? Because I'd watch that one.

**@jennydeluxe**

One thing NBC is doing right: Letting the cameras linger on the Olympian families who all look and act batsh\*t crazy

**@inafried**

Wow, they just found a potential juror that doesn't have a cell phone. Not sure if that makes her perfect or unqualified.

THE STRIP

BY BOX BROWN



DISTRO  
08.03.12

ESC

TIME  
MACHINES

WHAT IS THIS? TAP  TO FIND OUT





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